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EXCHANGE

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# THE UNIVERSITY OF PENNSYLVANIA

## THE UNEMPLOYED IN PHILADELPHIA

BY

JOSEPH H. WILLITS

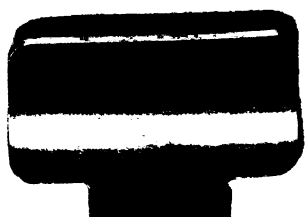
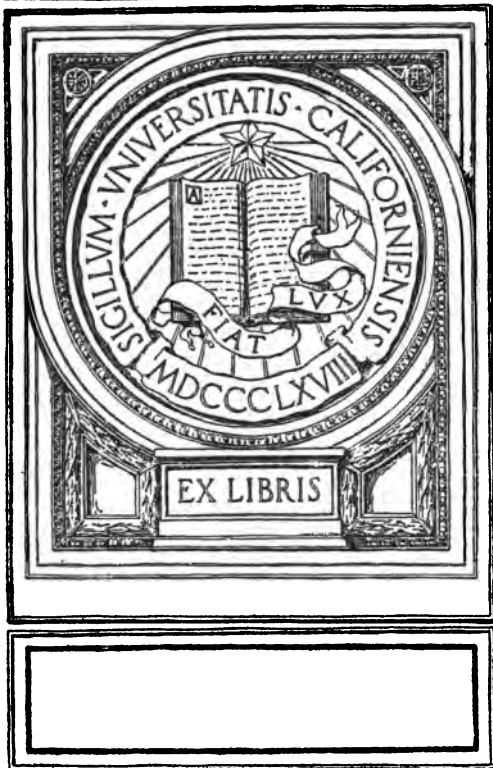
A Thesis Presented to the Faculty of the Graduate School  
in Partial Fulfillment of the Requirements of the  
Degree of Doctor of Philosophy.

PHILADELPHIA

1915

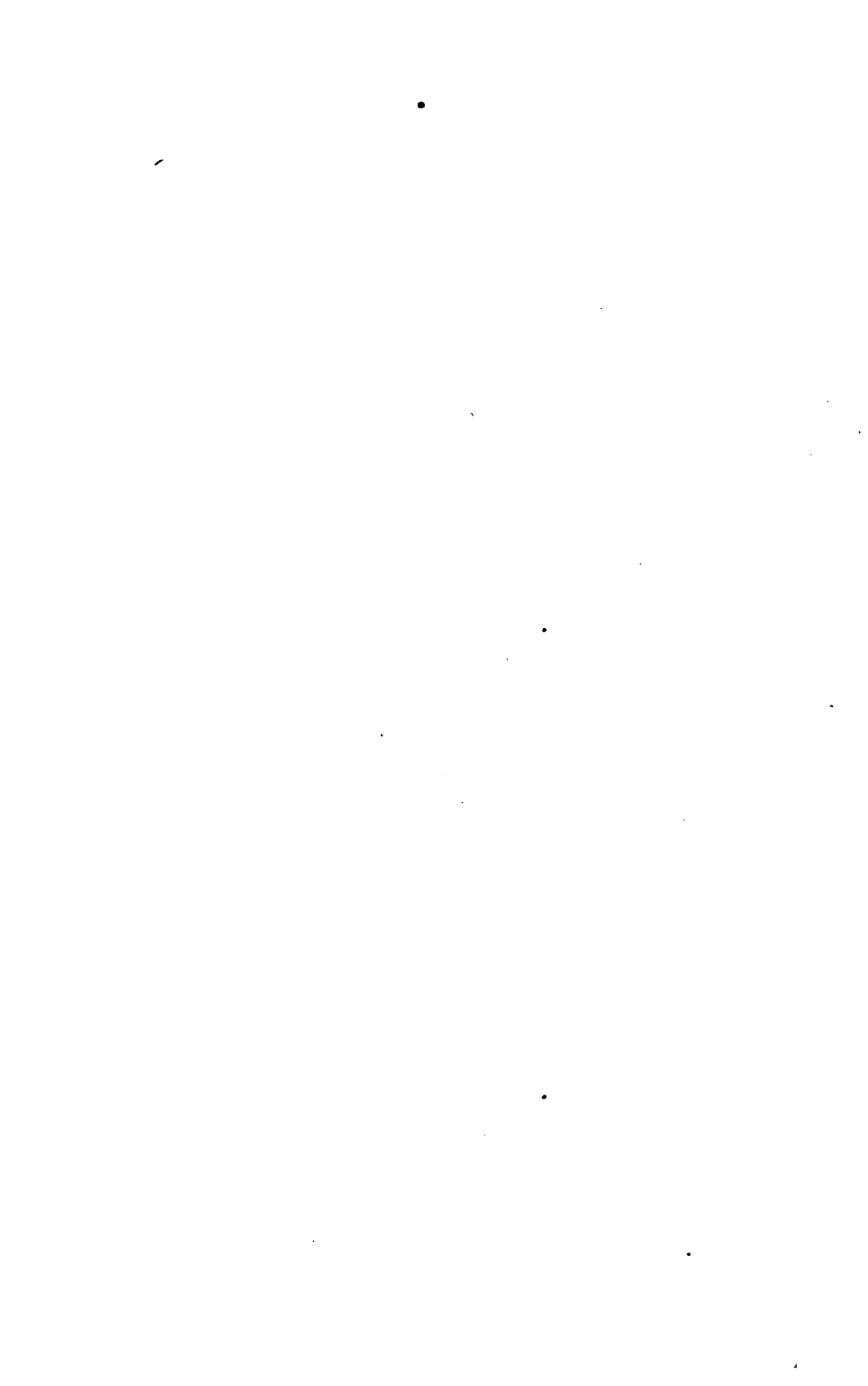


EXCHANGE











# PHILADELPHIA UNEMPLOYMENT

WITH SPECIAL REFERENCE TO THE TEXTILE INDUSTRIES

A REPORT BY

JOSEPH H. WILLITS, A.M.,

Instructor in Industry, The Wharton School of the  
University of Pennsylvania

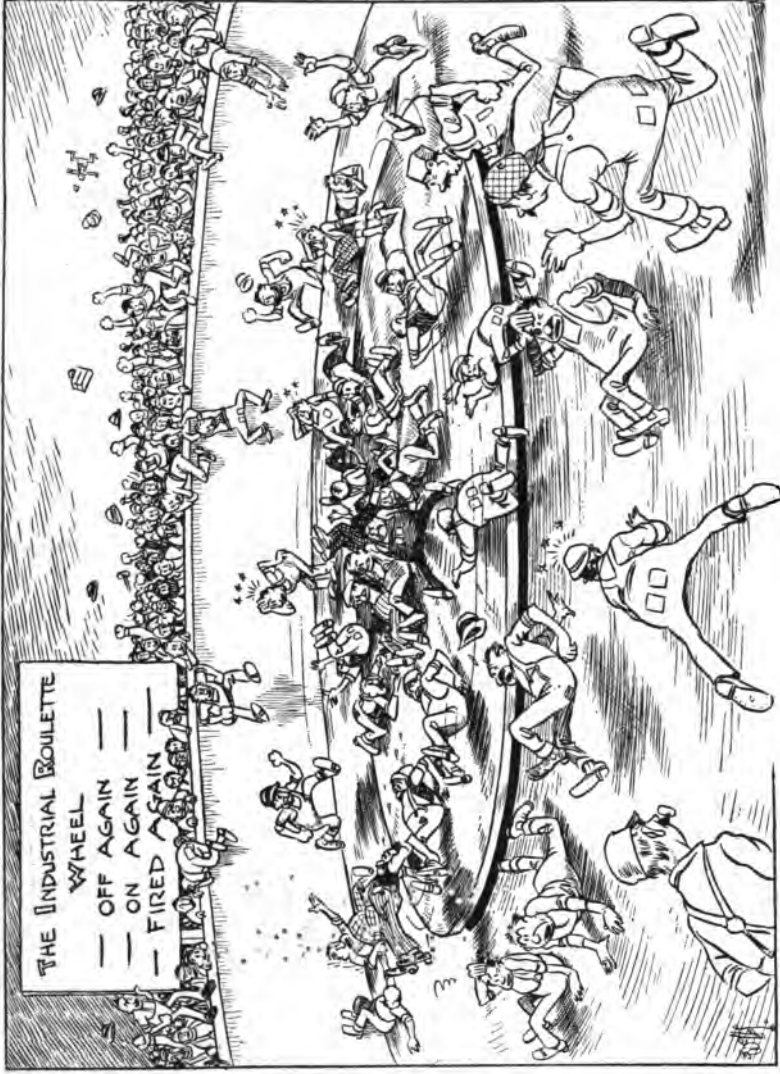
*A Thesis Presented to the Faculty of the Graduate School of the  
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DEPARTMENT OF PUBLIC WORKS  
CITY OF PHILADELPHIA  
1915



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In industrial concerns employees are continuously coming and going. The number hired and fired is out of all proportion to the number employed. The average concern hires as many new persons during a year as it employs regularly. Such an excessive hiring and firing is costly to employers, has a degenerative effect on employees, and is one of the basic causes of unemployment. (See page 77.)

## FOREWORD

In December, 1914, a meeting of business men was called by Mayor Blankenburg with a view to seeing what steps the Philadelphia community should take with regard to its unemployment problem. This meeting was attended by Samuel Rea, President of the Pennsylvania Railroad; J. Howell Cummings, President of The John B. Stetson Company; J. W. Van Dyke, President of the Atlantic Refining Company; Franklin Brewer, General Manager of Wanamaker's; Louis J. Kolb, of the Kolb Bakery Company; Joseph Steele, of Wm. Steele & Sons Co., builders; Louis Bloc, of the Ford Motor Company, and several members of the Mayor's cabinet.

The number of men and women out of employment had at that date not reached so high a total as was experienced during the following January and February. The meeting was called together with the thought of taking all possible steps which might act to minimize the ultimate amount of unemployment. A number of suggestions as to possible lines of action were made. It was the concensus of opinion that the agencies then at work would give the maximum of relief to the immediate situation. The conference felt that the municipality should rather acquaint itself with the problem in its broader aspects, to find out what other municipalities were doing in this matter, and to make a general study of the problem of unemployment such as would suggest what steps might be taken to minimize it in the future in Philadelphia. As there was a vacancy then existing in the position of General Inspector, Office of the Director, Department of Public Works, and as this position was exempt under civil service rules, it was suggested that this vacancy be filled by the appointment of a student of economics qualified to carry on an inquiry into each of the phases of the general unemployment problem. ✓

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This suggestion having received the unanimous approval of the conference, and after several weeks of search for the right man, announcement was made of the appointment of Joseph H. Willits, 4519 Sansom Street, Instructor in Industry in the Wharton School of Finance and Commerce of the University of Pennsylvania. The selection of Mr. Willits was approved by his associates in the faculty of the Wharton School and he was given an eight months' leave of absence in order to give his undivided attention to the work.

In this report it will be noted that an effort has been made to get down to the basic causes of unemployment and to describe a standard, which it is believed will, during the next generation, be forced upon any industrial community which is to compete in any large and successful way with sister communities at home and abroad.

Grateful acknowledgment is hereby made to those employers and employees (as well as others) whose courtesy and co-operation made possible the gathering together of the information which makes up this report. The almost unanimous desire of employers not to have their names mentioned in connection with information furnished, makes it unfortunately necessary that cases shall be referred to anonymously. A partial list of those interviewed is to be found on page 158 of the appendix.

Signed,

MORRIS L. COOKE,

*Director.*

## SUMMARY

We know so little about unemployment that it is almost impossible to discuss it intelligently. What little we do know shows that it is not simply a problem of an acute industrial crisis, but is, in many industries, a normal condition of business year in and year out. This chronic unemployment can be more easily affected by local efforts than can the unemployment of industrial crises.

The textile industry and the clothing industry reveal chronic unemployment at its worst. It is very doubtful whether the lace weavers of Philadelphia have averaged more than 3/5 time in the last 5 years. One large carpet mill, selected to be as nearly representative as possible, has never failed to lose 20 per cent. of its time any year in the last 4 years. The manufacturers of dress goods frequently do not make over three-fourths of the year's normal working time. The women's cloak and garment factories ordinarily run at 20 per cent. of capacity, for four months of each year. One large railway equipment plant has not averaged over 50 per cent. capacity in the last 5 years. It is estimated that dock hands, on the average, do not work over two days a week. Every winter thousands of Italians return to Philadelphia from the truck farms in South Jersey and render the city's unemployment problem more acute.

Unemployment menaces the leadership of any industrial center in the competition with other rival centers. Workers degenerate in skill, industry, thrift, and standards of living and public morality. The industrial welfare of employers is eventually endangered.

As a community, we should take every possible step to mitigate the injury, to the community, caused by unemployment. We cannot depend upon either public or private charity to cope with this matter. For charity, although at times necessary, does not solve the problem because it deals only with the human suffering resultant from the industrial situation, and not with

the situation itself. It is, moreover, degrading to those who honestly seek work and encouraging to those who seek to "sponge." Meeting unemployment by charity is not a solution—it is an admission that something needs adjustment in our industrial society.

#### INDUSTRIAL MANAGEMENT AND UNEMPLOYMENT

Unemployment is a problem of industry; and as such, can only effectively be handled by those in charge of industry: employers. Some phases of unemployment, as, for instance, that caused by widespread industrial crises, arise from causes that are nation- or world-wide in origin, and are, of course, beyond the control of the individual employer; and the best efforts to furnish steady employment at such times may fail. Chronic unemployment however can be very greatly reduced, if not altogether eliminated, by each employer in his own plant. It is distinctly "up" to him. He should regard his employees and himself as an industrial family toward which he has a responsibility similar to that toward his own family. This will in the long run prove the only sound business policy. Such responsibility will include, first of all, the obligation to furnish continuous, full time employment, with the fewest possible number of changes in personnel, so long as it is at all financially safe for the employer to do so.

The practice of the more successful and thoughtful concerns exhibits methods which should be generally adopted in meeting unemployment. Each employer should:—

1. Secure and analyze the facts of unemployment and of lost time in his own plant. Daily records should be collected in order that a firm could tell, at the end of any period, just how nearly the actual employment furnished approached the possible employment if continuous full time operation had been made. It should know constantly just what the "modulus" is.

2. Keep his cost record in such a way that, during slack times, the expense of operating shall not be exaggerated. It appears that much unemployment is created by firms which do not fully appreciate what the loss incurred by such a practice means to them. Some accounting methods make that division of

the plant in operation bear, as a part of its cost of production, the expense of the division standing idle. This expense should be charged as a business expense, as, under the mentioned system it exaggerates the loss of running during slack times, and thus contributes to early shut-downs and lost time.

3. Keep on the payroll only those to whom he can offer permanent employment. This ideal can be forwarded by training employees, or even a few of his employees, to do several tasks, so that they can be shifted from one department to another, as the demand for help in each varies.

4. Reduce the excessive amount of hiring and firing (i. e., the labor turn-over), which is, in most industrial plants, out of all proportion to the number employed. This fundamentally affects the unemployment problem.

High labor turn-over can be reduced:

a. By more care in the choosing and firing of help. Employment in each concern should be centralized in charge of one responsible manager.

b. Better methods of training help.

c. Steadier employment within the plant.

Recognizing the connection between the efficiency of employment methods and unemployment, the Philadelphia Association for the Discussion of Employment Problems was started at the invitation of the Director of Public Works among a number of employers.

5. Closely co-ordinate the selling and manufacturing ends of a business. The manufacturing end should have sufficient control over the selling end to establish a selling policy that shall use every possible effort to make regularity of production possible by offering regularity of orders.

6. Eliminate time lost waiting for materials, such as "dyed" goods.

7. Bring about an exact balance of departments so that one department that "feeds" or is "fed" by another shall not be so large as to lose time waiting for another to catch up.

8. Avoid loss of working time by stock taking.

9. Not place a limit on the amount one employee may earn each week.

10. Adopt a standard daily production basis for the factory ; and hold to that basis wherever possible.

11. Manufacture for stock in slack seasons.

In addition, there are a great many minor ways in which, during an industrial crisis, employers can relieve the burden of unemployment. For example:

1. Give advance notice of lay-off.

2. Distribute work among as many individuals or families as possible.

3. Arrange that employees of the plant shall have their idle periods so grouped that the time may be used to secure temporary work outside.

One Philadelphia concern pays its help in such a way as to accentuate the burden of unemployment. Most firms pay out wages every two weeks, whether full or part time is made. This firm, however, does not pay until employees have given two weeks of actual working time. This means, that if the firm is working two days a week (as it is very apt to do), the men must work six weeks before receiving a pay check. The evils of this system have, from a variety of friendly sources, been called to the attention of the heads of this concern. All suggestions have been consistently ignored.

#### THE CITY GOVERNMENT AND UNEMPLOYMENT

Since unemployment is primarily a question of industry, the chances for aid from the city government are limited. But, within its limits, the government should do everything humanly possible to assist in meeting unemployment. Whenever practicable, the city should work ahead of schedule on its construction, so that work may be furnished at times when opportunities for private work are at the lowest ebb. This program is necessarily greatly restricted in value, because the city could hardly hope to furnish more employment at such times than would be furnished annually by one private concern, employing 800 to 1,000 persons.

Municipal work, being chiefly outdoor construction work, is not of a character which could feasibly be done by most classes of unemployed. Then, too, simon-pure relief work, created solely to furnish employment and carried on at no set standard of efficiency, is, like charity, to be condemned, except as a last resort.

However, the city should realize its obligations in cases like the following:—

1. The work of building our new subway system should be so conducted that it will not end suddenly and thereby throw upon the city's industries the large contract of absorbing, in a lump, thousands of unemployed.

2. There should be "all the year round" work for regular municipal employees.

3. The city should co-operate with the State Department of Labor and Industry and with the Federal Department of Immigration to establish a public employment bureau, the duties of which shall be as follows:

- a. Endeavor to bring together employers seeking help and employees seeking work.

- b. Act as the city's headquarters in a steady fight against unemployment.

- c. Endeavor to establish a clearing house for dock labor.

- d. Endeavor to bring about regular seasonal transfer of workers between trades whose seasons dovetail.

- e. Co-operate with the Department of Vocational Guidance and Instruction in the Board of Education; and act as a vocational guidance bureau for young people.

- f. Assist in the collection and dissemination of knowledge concerning unemployment.

- g. Eventually administer unemployment insurance when that plan shall have become practicable.

Such a bureau has recently been established by the state, and plans for the co-operation between the three government agencies suggested.

At the present time, we do not need a separate municipal lodging house for homeless men, although the city should stand



ready, as a last resort, to furnish additional emergency quarters in severe times. Prevailing practice and opinion recommends that the lodging houses now supported by private charities should be taken over in toto by the city government.

#### THE CONSUMER AND UNEMPLOYMENT

Consumers can contribute to regularity in employment by refusing to follow extreme styles. Householders should realize their obligation to "hire-a-man" and move forward as much work as possible. Employing concerns and private individuals can also aid by purchasing, during slack times, in anticipation of future need so that industry may be started.

A campaign by the Consumers' League or the city government might profitably be undertaken for this purpose.

JOSEPH H. WILLITS.

## UNEMPLOYMENT IN PHILADELPHIA

**INTRODUCTORY NOTE.** At the outset of this report attention is called to the difference between the unemployed person who can and will work, if he has the chance; and the unemployed person who is unable to work through physical incapacity, or who would "starve to death alongside of a job before he would work at it." The larger amount of advertising that these, "the unemployables," receive, blinds many citizens to the very existence of the first class. From the point of view of immediate community welfare, the problem of the first class is the more important, for it is the degenerating effect of this form of unemployment that drives many self-respecting and capable workers into the "unemployable" ranks. This report primarily has reference to the "unemployed." The handling of the second class is largely, though not altogether, a sociological, not an industrial problem.

## PART I—FACTS OF UNEMPLOYMENT

The most fundamental fact about unemployment in Philadelphia or any other American industrial center is that we know practically nothing about it. We do not know its extent; whether it is increasing; in what industries it exists; just what are the different causes that bring about lost time; nor just how unemployment affects the worker's standard of life, his work and his citizenship, as well as the efficiency of the plant. Not only do we not know, but we do not have any available information to which we can turn. So far as definite knowledge is concerned, we are still "up in the air."

The information collected by the various branches of government,—national, state and city—is still most vague and general in character. Every ten years the representatives of the United States Census come to Philadelphia and collect figures which show for one year the number of wage earners engaged each month in each separate industry.<sup>1</sup> The State Department of Labor and Industry at irregular intervals collects from a large number of representative firms a statement of the maximum and minimum number employed during the year, and the dates on which these high and low points in employment occurred.<sup>2</sup> Such information, while it is a step in the right direction, throws but the barest light on the extent, nature and causes of unemployment. The only local investigations have been made by the Consumers' League and by Phipps Institute. Since these investigations were not primarily concerned with unemployment, the information furnished on that subject is necessarily scanty.

The lack of definite knowledge goes deeper than the absence of public reports, statistics and investigations. A large percentage of employers have made little analysis of their own unemployment problem. They do not have available for their own or any one else's use data or information which shows the extent and causes of lost time in their plants. Until such information

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<sup>1</sup>Twelfth U. S. Census, Vol. 8. Census of Manufactures, pp. 276-281

<sup>2</sup>State Department of Labor and Industry, Bulletin on Variation in Employment.

is collected, our knowledge of the causes and nature of unemployment will remain in a very nebulous state. Very few of the labor unions keep any record showing even the amount, much less the effect, of unemployment; and only a small proportion of the records that are kept are thorough enough to be reliable. Moreover, the unions are apt, as a matter of policy, to exaggerate the amount of unemployment in good times. Conversely, in bad times, the fear that the strait of the workers, if known, may be used as a favorable opportunity to lower wages, leads labor unions to conceal the real facts. Finally, the figures, even if complete, would present information for but a small minority of the total body of Philadelphia wage earners.

The value of individual firms and of unions as sources of information is still further lessened by the hesitancy that many employers and some labor unions have of giving information to the public. The unions fear that the employer will find out something about the organization which he may use to its injury. The employers, as a rule, fear that information which may be used to their injury, will reach business competitors, employees, or some regulating government agency. Most of the information for this report obtained from employers has been secured under the promise not to mention the name of the firm or the individual. The results of this "hush" policy make the study of unemployment very much like a case of "blind man's buff."

Aside from these vague sources, Philadelphia's information about her own unemployment is confined to what appears in the newspapers or is passed around by word of mouth. Our ignorance is abundantly evidenced whenever the amount of unemployment rises above the normal, by the wide variation shown in the "estimates" of the number of unemployed that appear from one source or another. For example, during the winter of 1914-15, the estimates of the number of unemployed in the city ranged from 50,000 to 250,000. No one knew the accurate guess from the inaccurate one; no one could tell the honest guess from the one that was deliberately faked. We were at sea between the exaggerations, on the one hand, of the calamity howler and the exaggerations, on the other hand, of the conscious preacher of

optimism. Small wonder that many sincere persons were at a loss to know to what extent the city was justified in resorting to ultra-heroic measures.

Not until the end of the summer months,—long after the time for decision was past,—was the public as a whole put in possession of information that gave a more definite idea of the extent of unemployment. In order to throw a little more light on the amount and sources of unemployment during the past winter, the Metropolitan Life Insurance Company was invited, by Mayor Blankenburg, to conduct an unemployment canvass among the families of those who held policies in the company. The Metropolitan Company placed the City of Philadelphia under obligations to itself by agreeing to aid, and lent its splendid organization for the purpose. The canvass was conducted during the week beginning March 15, 1915, by the agents of the company from each of the company's branch offices. A copy of the blank filled out by the agents of the Metropolitan Life Insurance Company at each house visited, is to be found on page 126 of the appendix.

In this study the agents of the company called on 78,058 families, in which were 137,244 wage earners,—about 18 per cent. of all the wage earners in the city. Of the wage earners canvassed, it was found that 10.3 per cent. were entirely out of employment and that 19.7 per cent. in addition were working part time.

Canvasses conducted in other cities by the U. S. Department of Labor Statistics point to the conclusion that the Metropolitan figures are typical for the entire city. If that be so, there were in Philadelphia in the middle of March, 1915, approximately 79,000 unemployed and approximately 150,000 part time wage earners. It is significant that the state of affairs as revealed by the above figures was less severe than in most other large cities where similar canvasses were conducted.

This canvass disclosed the fact that the textile industries and building trades furnished the largest number of unemployed; of whom over one-fifth had been out of work over six months. In less than one-fourth of one per cent. of the cases was unemployment due to strikes or lock-outs. The detailed report of the canvass is found on page 127 of the appendix.

## THE PERMANENCY OF UNEMPLOYMENT

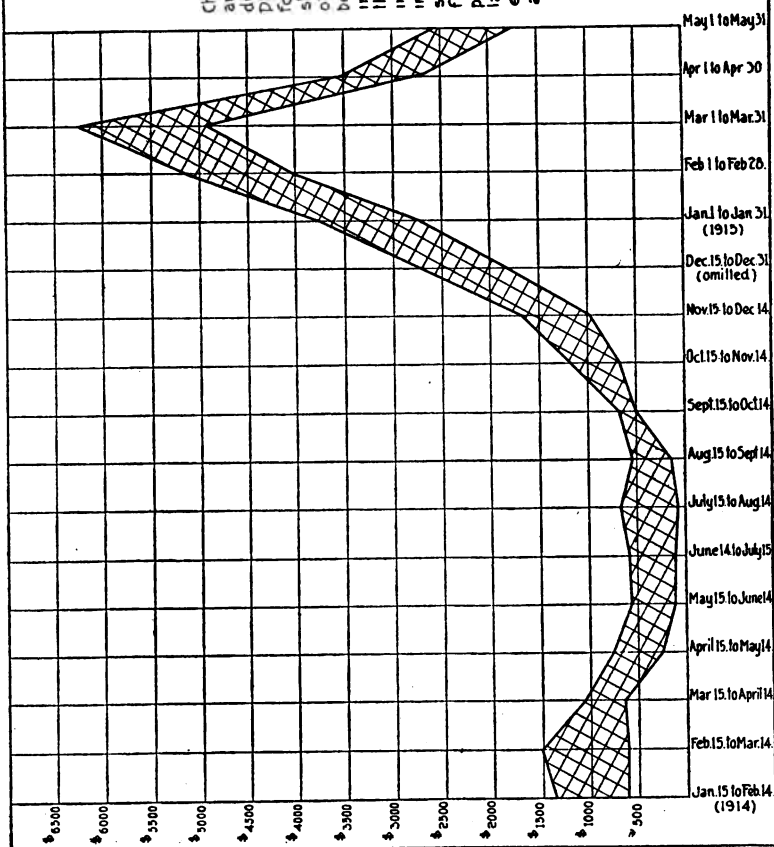
The absence of dependable information about our own unemployment limits discussion, in most instances, to general statements. Data can be used chiefly for purposes of illustration rather than as comprehensive summaries of an entire situation. However, this fact stands out: unemployment is permanent, if not steadily increasing. When we ordinarily assume that men and women who are willing and able to work are minus a job only in times of unusual and widespread industrial depression—such as we experienced during the last winter—we lose sight of the fact that there is always, even in the most prosperous times, a large amount of unemployment and part time employment for these same workers. In the long run, this permanent or “chronic” unemployment totals larger than the unemployment of the severe industrial crises. This is true because the former exists continuously, year after year; whereas a crisis usually occurs only once in a period of five, eight or ten years. Moreover, from the city’s standpoint, this chronic unemployment is of greater concern because it arises chiefly from local causes.

The Society for Organizing Charity testifies that there is always in “good” years and “bad” alike, a considerable number of applicants for aid who, though willing and able to work, are forced to seek charitable assistance because of the impossibility of securing employment. Fig. 1 shows the total amount of relief granted by the Society for Organizing Charity each month during 1914 and to May, 1915; and, of this total, the percentage which was due to unemployment. In many cases, undoubtedly, other causes have contributed to throw these applicants onto charity after merely a brief period of unemployment; but this fact does not detract from the evidence shown by the chart of a considerable amount of unemployment always present.

As a result of over one hundred interviews with the managers of business houses and social workers, and as a result of studies made in individual industrial plants, information has been collected which indicates the permanence of unemployment. This also indicates roughly those industries in the city in which unemployment is normally a large factor.

**FIG. 1**

Chart showing the variation in the amount of money relief furnished during seventeen months by the Philadelphia branch of the society for Organizing Charity. The unshaded portion shows that part of the relief which was furnished because of impossibility of securing employment on the part of those who were able to work - in the opinion of the Society's investigators. Note the fairly constant size of the relief furnished for causes other than unemployment and the great irregularity of relief furnished unemployment - almost none at all in the summer months



### *A. The Textile Industry*

Of Philadelphia industries, the textile and clothing manufacturing show unemployment and part time employment at their worst. In the textile industries, the fact which immediately strikes the observer is that although very many more workers are unemployed in industrially "bad" years, yet there is always, even in the most prosperous years, a very considerable percentage of the workers who are either entirely idle or working from one to five days a week. Mr. R. R. P. Bradford, whose sixteen years' experience in charge of the "Lighthouse" (a social center for the better class of workers in Kensington) has given him an unusual opportunity to become acquainted with the facts, says:

We make the mistake of assuming that unemployment is a question solely of severe bad times. It is true that conditions are worse at such times,—they even approach the destructiveness of a flood or an earthquake. But it is true that unemployment and part time employment is a situation that is with us to a very considerable degree practically without cessation. If it is not one industry, it is another. If one mill escapes, another is hit. The fear of unemployment and part time employment hangs, a permanent pall, over Kensington.

It is worth while to point out two general conditions that especially contribute to permanent unemployment in the textile industries. First is the constant shift of demand from one type of textile fabric to another. The industries that have been built up to supply products no longer demanded by the market must gradually die out, or readjust themselves to a new demand. During the decadence of these industries, the numbers of workers that have been attracted to the industry is greater than can now be kept busy. These employees hesitate to leave the industry for some other, probably uncertain and unaccustomed, line: conditions may improve in their own trade. Moreover, under existing circumstances in industrial plants, they feel that the skill acquired by years of work in their own trade will be sacrificed, and many are too old to risk the change. An excess of workers is, therefore, characteristic of a declining industry. A long period of part time and of unemployment, often running into years,



results. A letter from one of the editors of the Textile Manufacturers' Journal, showing the frequency of the rise and fall in textile industry, is found on page 150 of the appendix.

A second condition that contributes to irregularity in employment, and is very much more important now than it was twenty years ago, is the growing tendency,—especially in hosiery, higher grade carpets and fancy dress goods,—to manufacture solely “on orders.” Twenty years ago a manufacturer made carpet or hosiery or cloth and then went out and sold *that* carpet, or hosiery or cloth. To-day the order comes in for a particular design, with a certain kind of yarn or silk and a certain number of threads to the inch, and the manufacturer makes that particular order. Formerly a manufacturer produced standard makes of his particular line and simply piled up stock in his warehouse in the off-season. When the orders began to come in thick and fast, at the proper season, he was ready for them and simply used up his stock. To-day manufacturers make, as a rule, very little to stock and run chiefly on orders. The result is that manufacturing has become nearly as irregular as the orders. When an order comes in, or especially when orders come in thick and fast at the proper season, there is a period of feverish activity until they are delivered, and then probably a long period of total or partial unemployment. A number of workers were interviewed in their homes in a block in which live the more industrious middle class workers in Kensington (hereinafter referred to as Block “K”). The experience of one man (a warper) in this block represents a situation prevailing in a large percentage of the textile factories.

“The second week after I was employed at....., I was called on to work overtime four nights till 9 o'clock at night. On Saturday of that week, I, with four others, was laid off for lack of work.”

The prevalence of unemployment is forcibly illustrated in the different branches of the textile industry in Philadelphia.

1. **Lace and Lace Curtains.** The last ten years has witnessed a steady increase in unemployment in the lace, and par-

ticularly in the lace curtain, business. There is no longer the demand for the lace curtains which fifteen years ago adorned parlor and bedroom windows alike. Consequently the lace mills have rarely worked full time during the last six years. The gradual decline of output is illustrated by the figures of one of the large lace mills in Philadelphia (see fig. 18)<sup>1</sup>. It is claimed that some mills contain a large number of expensive machines that have never been used. Since both the employers and the lace weavers' union attempt to distribute what work there is among as many workers as possible rather than assist a portion of the employees to new trades, permanent part time employment results. A second feature of the lace industry is its extreme irregularity. A new style in ladies' garments may make a sudden demand for a large amount of lace. The United States Government may send in once a year a large lumped order for mosquito netting for the Panama Canal Zone. With plenty of machines and plenty of men already working part time or out on the streets waiting for a call, and a premium placed on prompt delivery, the firm rushes the order out in a short time—and the next month pay envelopes flatten out

This condition of permanent unemployment among the lace workers is very generally testified to. The head of one of the largest lace mills in Philadelphia, was asked whether, in his opinion, the lace and lace curtain workers had on the average worked three-fifths of their time in the last five years. He said doubtfully, "I *think* so." The doubt in his words and in his voice implied that they certainly could not have averaged much above that. A lace weaver interviewed in Block "K" asserted that he had been working five hours a day for the last five years. This statement was independently confirmed by neighbors. The secretary of the National Lace Weavers' Association (one of the most intelligent and fairminded labor men I have met) reports that, in his opinion, the average lace worker in the last five years, has not made ten weeks altogether in which he worked full time.

Statistics of dues kept by the local Lace Weavers' Union

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<sup>1</sup>Page 72.

show the large amount of time that is lost by the lace weavers. The union has a graduated system for the payment of dues. Prior to January, 1914, a member who made over \$15 in any one week paid 75c. a week dues to the union. Members who made from \$7 to \$15 a week paid 50c. dues. Those who earned less than \$7 a week were excused for the week. In 1914, the wage limits which form the basis for the different classes of dues was changed. Since that time those earning over \$18 a week paid 75c. dues; from \$10 to \$18, 50c. dues; under \$10, no dues. To be excused in whole or part from payment of dues, a member must produce his pay slip each week. The dues paid for each and every week are recorded in the roll book. The records thus kept appear to be accurate and reliable. These records, therefore, show clearly what members received less than \$7 (or \$10), from \$7 to \$15 (or from \$10 to \$18) and over \$15 (or over \$18) per week. Both employers and employees testify that "almost any kind of lace weaver can earn \$20 a week if running full time, and they frequently make over \$30 a week if running full." The vice-president of one of the largest lace mills in Philadelphia writes as follows regarding the full time wages among lace weavers:

If all the weavers on the Nottingham lace curtain machines were divided into three general classes, low grade, medium and high grade, both from the standpoint of the ability of the weaver and the gauge of the machine on which they work, and bearing in mind that all Nottingham lace curtain machines run at the same speed whether fine or coarse, competently or incompetently managed, we believe the following would be a fair average earning:

Low grade Nottingham lace curtain weaver .....	\$18.00 per week
Medium grade Nottingham lace curtain weaver..	21.00 per week
High grade Nottingham lace curtain weaver .....	24.00 per week

When it comes to a lace weaver, we cannot give the earnings with the same exactness, as a lace weaver may be skilled in one class of lace work and grossly incompetent in another. Most lace weavers have learned their trade in a locality making almost entirely one class of goods, and under the new condition of an American industry that must be resourceful to make any class of goods as styles may change we are encountering great difficulties. Aside from this fact, the weavers here are paid under a modified English card which puts a high rate on the bobbin fining goods for

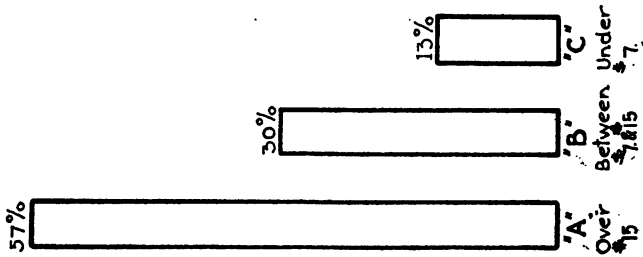
which England is preeminent and a very mixed card rate on the independent beam goods made almost entirely in France.

The best approximation that we can make we would report as follows:

Low grade lace weavers .....	\$20.00 per week
Medium grade lace weavers .....	25.00 per week
High grade lace weavers .....	30.00 to 35.00 per week

We would like it understood, however, that this is only an approximation, as on plain bobbin fining nets, which require less skill than perhaps any other class of goods, they some times get a weekly earning of more than \$35.00 per week. This is one of the contradictions of the card under which we pay.

The union roll book statistics therefore indicate roughly the amount of part time employment and unemployment in the lace business. These statistics were compiled from the union's roll book, covering between 300 and 400 members. These records show that from January 1, 1909, to January 1, 1914, 13 per cent. of the cases of members reporting showed a weekly wage of less than \$7; 30 per cent. earned from \$7 to \$15 per week, and only 57 per cent. earned over \$15 per week. This result is shown graphically in fig. 2. In other words, in only 57 per cent. of the cases reported in all of the working weeks was anything approaching full time made in that period. In 43 per cent. of the cases, three-quarter time or less had been worked; and in 13 per cent. of the cases, the members must have worked not over one-third time. Since January, 1914, when 75c. dues were required only when the weaver earned \$18 or over, only 30 per cent. of the cases have paid the highest dues. In other words, since January, 1914, anything like full time has been reported in approximately 30 per cent. of the individual working weeks. Since January, 1914, wages of from \$10 to \$18 a week were reported in 36 per cent. of the cases; and 34 per cent. of the cases reported less than \$10 a week. In other words, stating it conservatively, in 70 per cent. of the cases of individual working weeks during 1914 and to July, 1915, the weavers must have worked not over nine-tenths time; and in one-third of the cases of individual working weeks reported, the time worked may have been none and could not have been over half-time.



**FIG. 2**

Figures of the Phila. Lace Weaver's Union from Jan. 1st. 1909 to Jan. 1st. 1914. Chart shows for all the individual working weeks the percentage of cases in which was reported a weekly wage of

COLUMN "A" - over \$15.00

COLUMN "B" - between \$10.00 & \$15.00

COLUMN "C" - less than \$10.00

Recalling that "almost any kind of a lace weaver can earn \$20.00 a week if running full time" it becomes apparent how far the lace weavers as a whole fall short of attaining full time. Continuous full time operation during this period would have meant that COLUMN "A" would have included practically all of the cases save where sickness or voluntary absence of the worker reduced the wage scale. Since less than 3% of time ordinarily lost for these reasons, their influence in affecting the chart is negligible.

stated more simply this chart roughly means this! -

(1) In 57% (COLUMN "A") of the individual working weeks  $\frac{3}{4}$  time or better may have been made.

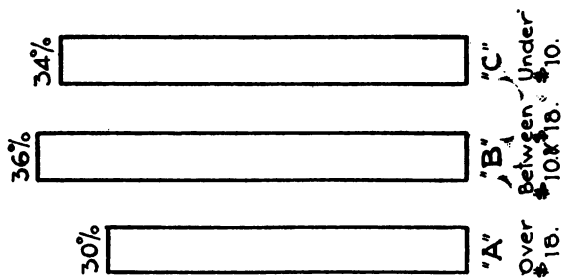
(2) In 30% (COLUMN "B") of the individual working weeks, conservatively speaking  $\frac{1}{2}$  to  $\frac{3}{4}$  time was made

(3) In 13% (COLUMN "C") of the individual working weeks, third-time or less was made.

The union statistics show also that the low dues do not come from a few particular individuals, but come fairly evenly from all,—indicating that difficulty which all have in securing work and not low earning power of a few, is responsible.

These results are shown graphically in fig. 3. Charts showing for each week in the last six years and one-half the number of members paying each different class of dues are found in the running charts (figs A & B) on page 124 of the appendix. Since the lace-weaving trade is completely unionized, these figures represent the whole trade. It should be remembered that these figures include weavers only and that there are a great many others (about 5,000 in all) employed in the lace industry in Philadelphia. These running charts show great irregularity in the size of the groups earning the different classes of wages. Frequently, for a month, 80 per cent. of the cases will report over \$15 per week. Shortly after, will follow a month in which only 40 to 50 per cent. of the cases will report over \$15 per week, and from 10 to 20 per cent. of the cases will report less than \$7 per week. Such extreme irregularity can be occasioned only by extreme irregularity in employment.

**2. Carpet.** The amount of unemployment permanently existing in the carpet industry, although relatively smaller than in the lace business, is very considerable. The rapid rise and fall of different branches of the same industry, which causes a long period of part time employment in the decadent stages of an industry, is also marked in the carpet business. During the last 15 years, the development of cheap grass and other kind of rugs has led to the almost total extinction of the manufacture of "ingrain" carpet which was once the chief kind manufactured in Philadelphia. After a long period of part time employment, many of the firms who formerly manufactured "ingrain" carpet have either gone out of business, or replaced ingrain machinery with machinery to manufacture wilton, brussels, axminster, or tapestry carpets and rugs. When rugs began to replace carpet in popular esteem, the wilton and brussels carpet manufacturing concerns grew busy, expanded and took much of the business away from the axminster and tapestry carpet manufacturers. Recently the makers of axminster and tapestry



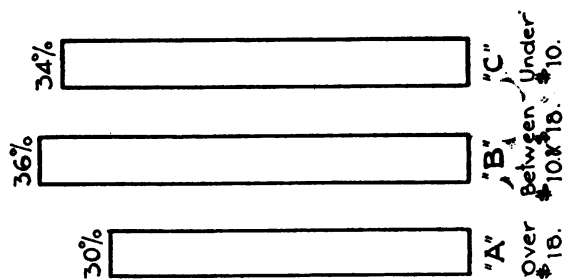
**FIG. 3.**

Figure 3. - Same as Fig. 2., save for the years 1914 and to June 1915. (The wage classification is slightly different from Fig. 2.)

- Stated simply this chart tends to indicate
- (1) In 34% (COLUMN "C") of the individual working weeks reported for 1914-1915, something less than half time was made.
  - (2) In 36% (COLUMN "B") of the cases from half to nine-tenths time was made.
  - (3) In 30% (COLUMN "A") of the cases was anything approximating full time made.



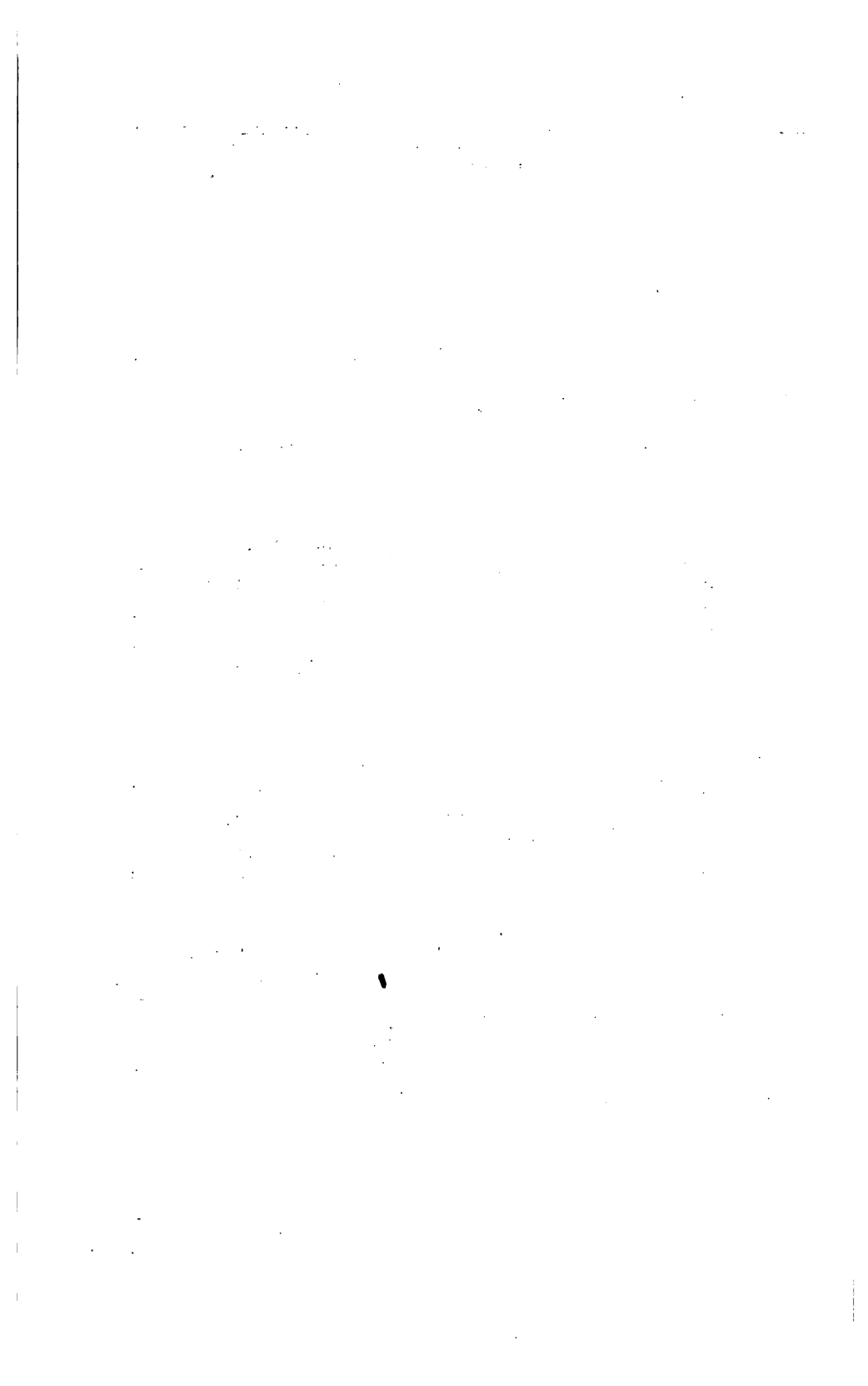




**FIG. 3.**

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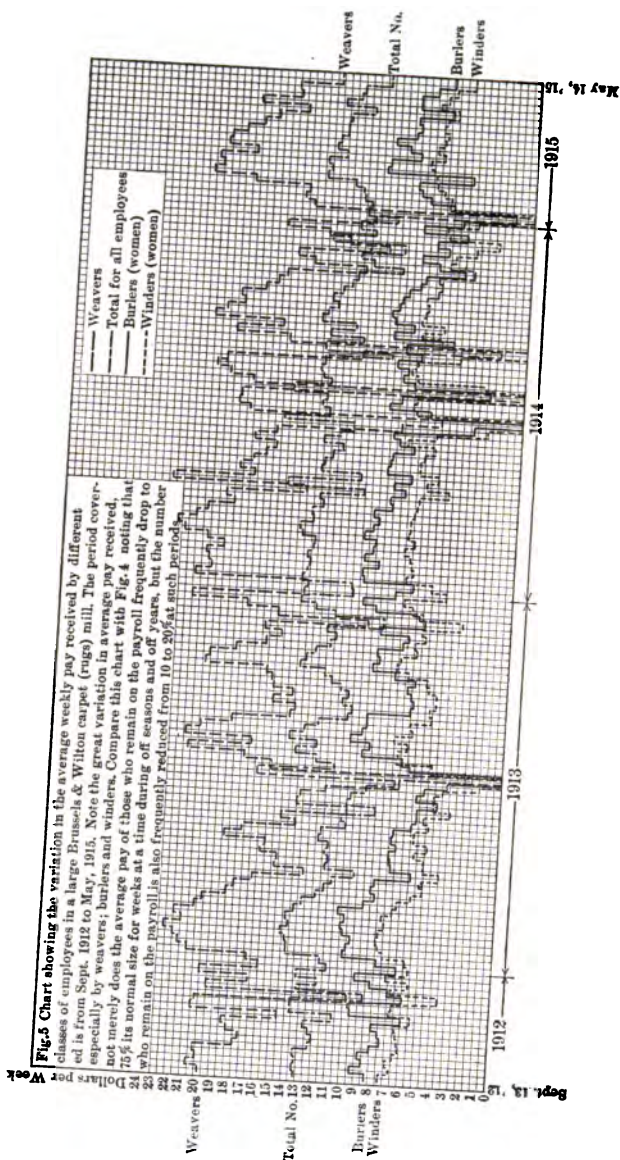




carpets have come to manufacture very satisfactory rugs. Since these rugs are cheaper than the wilton and brussels rugs, some of the trade has in recent years swung back to these firms.

The tendency to manufacture solely to order has served to increase the irregularity in production and employment. The manager of one of the largest brussels and wilton carpet concerns in Philadelphia says, "I can remember 25 or 30 years ago, when we used to manufacture to stock in the off season. We would pile our warehouses full of stock; some times we had as much as \$100,000 worth piled up. Then when the season opened, we would hire all the carts and boys we could lay hands on and haul the stuff away to the station. Now we hardly manufacture to stock at all." For two months in the spring and two months in the fall this firm manufactures chiefly for samples. Charts showing the wide seasonal variation in the number employed and in the average wage per week in each department of this firm are shown in figs. 4 and 5. Note that in off seasons and off years, not only is the number of employees considerably reduced but also the *average wage* per employee. The records kept by the union in this industry furnish little or no measurement of the amount of unemployment. The secretary of the Weavers' National Association (with headquarters in Philadelphia) estimates that the union members of the industry have lost 25 per cent. of their time in the last five years.

In order to throw light upon the amount of time lost through a period of years in one representative axminster firm, an intensive study was made among the piece workers in a large well-known Kensington firm manufacturing medium grade axminster rugs. (Frequent reference will be made to the facts secured from the study of this firm which will, hereafter, be referred to as Axminster Carpet Mill "A.") The records of this firm were kept in such a way that the amount of working time spent by piece workers in the mill could be ascertained. In no year since 1910 have the employees actually on the payroll of this firm failed to spend at least 21 per cent. of the entire year's working time outside of the mill. During the entire period, 1910 to 1915, 28 per cent. of the time was lost by the em-



ployees of this mill. Since less than two per cent. of this lost time was due to vacations, we may assume that at least 26 per cent. of the working time was lost for reasons other than vacations. The time lost through sickness or voluntary absence of workers did not amount to over 3 per cent. of the total working time. The relation of time lost to time made each year is shown graphically in fig. 6. Nor does this measure complete the amount of unemployment occasioned by this one mill, because the time lost by employees in the mill waiting for material or other reasons is not included, nor is the time lost by those who are laid off whenever times begin to grow slack. For example, the force was reduced 20 per cent. from July, 1914, to April, 1915. Moreover, the time lost through daily and hourly interruptions, which were not considered of sufficient size to warrant the workers being sent to their homes, does not enter into these figures. Charts showing in detail the time lost each week in this concern is shown in fig. D<sup>1</sup> of the appendix. Where conditions vary as widely as they do in the textile industry, it is impossible to say that the figures of any one mill are typical for all the textile industries. It should be remembered, however, that the conditions in this mill are among the most favorable for steady employment. The business is not highly seasonal and the goods are not so subject to the influences of extreme style, that the firm is forced to manufacture solely on orders. On the contrary, the articles are sufficiently well standardized to enable the firm to make for stock up to the limit of its financial capacity, which is high. The experience and general ability of the management of this concern is above the average.

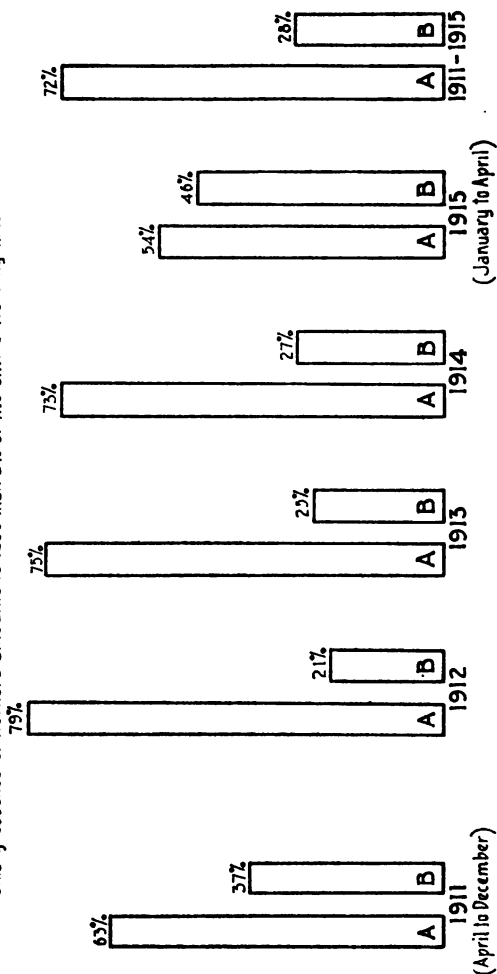
At page 125 of the appendix (fig. E) are the figures showing the great irregularity in the payroll of a number of carpet firms from week to week for the last two years and one-half. Such constant irregularity as this in total payroll implies a considerable degree of irregularity in employment.

The number of wage earners in the carpet industry in Philadelphia, and therefore the number affected by this irregularity in employment, is approximately 11,000.

**FIG. 6.**

Chart showing for Axminster Carpet Mill "A"

The percentage of each year's working time spent by those on the payroll, both inside (A) and outside (B) of the mill. This does not include time lost waiting for dye or other material in the mill nor the time lost by those laid off the payroll during bad times. Time lost is almost entirely due to irregularity or lack of orders for the time lost because of holidays, illness, or voluntary absence of workers amounts to less than 3% of the entire working time

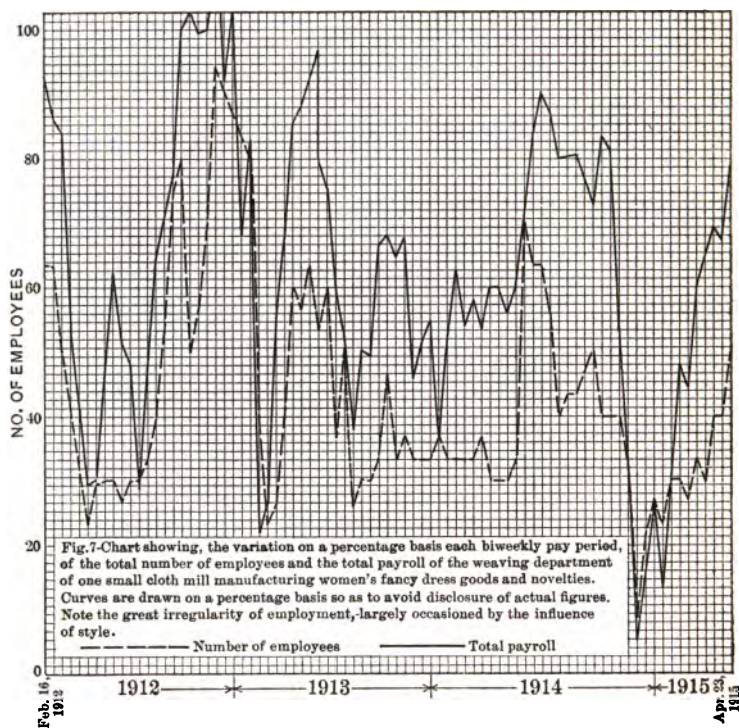


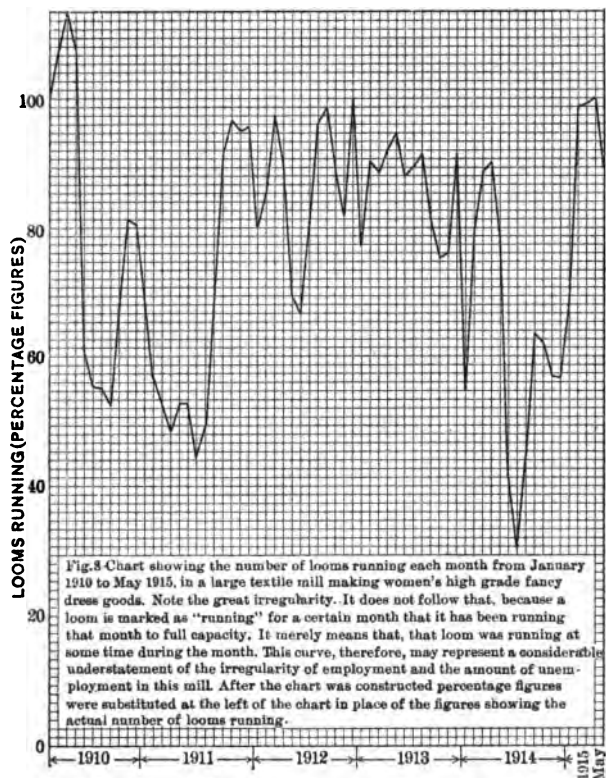
**3. The Cloth Industry.** The cloth industry includes a wide variety of cloth products from cheap cotton and woolen print cloth through all kinds of worsted and woolen goods to women's and men's wear and fancy dress goods. The development of textile manufacturing in the South, with its advantages to the employer of cheap labor, has led the manufacture of cheap cotton cloth to be transferred to the South within the last 20 years. In the same period there has been a big falling off in the demand for cheap woolen cloth, which was once one of the big cloth items manufactured in Philadelphia. The high grade woolens and worsteds are made chiefly in the big mills of New England. These considerations have led Philadelphians to become, to a considerable degree, manufacturers of "novelty" goods or fancy dress goods of various kinds. In a great part of this fancy dress goods business, production is exceedingly irregular because of the influence of style. The goods are not standardized and they depend on sudden veerings of style to create a new and sudden demand. When an order comes, rush delivery is demanded. When the order is filled, workers are idle. Many kinds of machines are required to manufacture the different varieties of dress goods. In many mills hands are trained to work on one kind of machine only. When a rush order comes it usually involves but one kind of weaving machines. The result is that workers on one set of machines will be working under high pressure, perhaps overtime; while workers on other machines in the same room are on the streets from lack of work. Two weeks later conditions may be reversed.

One small manufacturer of novelties reported that as a result of the above conditions he had not worked more than 50 per cent. of his machines at any one time in the last three years. Some idea of the irregularity in employment in such a plant may be obtained from fig. 7, which shows the variation in the number employed and the variation in average pay per weaver at each two-weekly pay day since February 16, 1912.

The figures of another large well-known concern, manufacturing women's high-grade fancy dress goods, indicated also the extreme irregularity of employment in this industry. Fig. 8







shows the wide variation in the number of looms running each month from January, 1910, to June, 1915. It does not follow that the looms classed as "working" were running steadily during the months indicated. Figures for the period 1910-1915 show that, each month, on the average, 36 per cent. of the looms did not operate at all; 64 per cent. were running, but not necessarily continuously. This result is shown graphically in fig. 9.

4. **Hosiery.** Lost time is normally less typical of the hosiery industry than of the three branches of the textile industry mentioned above. Even in normal, as well as abnormal times, however, the business is characterized by considerable irregularity. This fact is brought out on the chart in fig. 21,<sup>1</sup> which shows the variations in total payrolls of eight of the leading hosiery firms in Philadelphia for the last two and a half years.

In this industry a manufacturer may keep his girls busy on stock in dull times if he desires, but his finishing department is thrown out, because goods can be packed only on order under present conditions (in most cases), because the manufacturer puts up goods under the jobbers' trademarks. Conditions would be improved if all manufacturers agreed to manufacture under one trademark,—his own.

This statement of conditions in the lace, carpet, cloth and hosiery manufactures touches but the high spots of chronic unemployment in the textile industry. In other branches of the industry,—upholstery, for example,—the conditions are just as characteristic.

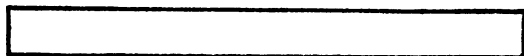
### *B. The Clothing Industry*

The clothing industry ranks with the textile industry in the seriousness of its unemployment situation. The men's and women's clothing manufacturers each employ approximately 15,000 persons in Philadelphia (mostly Hebrews), of whom the majority are women. The manufacture of women's clothing is the more irregular. Increase of unemployment here has been

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<sup>1</sup>Page 96.

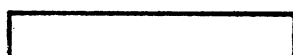
64%



running at some time during the month  
(not necessarily continuous)

A.

36%



idle the entire month

B.

**FIG. 9.**

Chart showing for one of the largest dress goods manufacturing concerns in Philadelphia, the percentage of looms that, on the average, stand idle each month and the percentage which run at some time (not necessarily continuous) during the month. This chart is based on the average for 65 months, -Jan. 1, 1910 to June 31, 1915.

due to the same vagaries of style responsible for irregularity in the cloth business. Changes of styles have made it possible to manufacture only at certain seasons. The very rapid increase in the frequency of style-changes, that has characterized the last two years, has served to break up even the regularity of irregular seasons and substitute a business characterized by sudden spurts followed by unemployment,—in an order so irregular that it is impossible to be predicted. The Women's Garment Manufacturers' Association reports that five years ago, if business conditions were normal, there would be two big seasons,—a spring and a fall season. Of these two seasons, the fall season was much the larger. In both seasons, however, there was but one main standard style for each line of garments. In preparing for the fall season, samples were made up in April, and the salesmen went on the road with these samples in May. Work on the orders sent in by the salesmen was begun in the factories in late June or July. This season continued until Thanksgiving, with July and August as the busiest months. During December little was done in the factories, except to make up samples for the spring season. Salesmen went out "on the road" early in January. Orders began to come in at once; the factories started and ran nearly to capacity until Easter. From Easter until June or July little was done except the manufacture of samples. It is estimated by the secretary of the Women's Garment Manufacturers' Association that during this off season in the spring, as well as during the fall (from Thanksgiving to early January), the plants ran less than 20 per cent. of capacity. The description of the seasonal variation of employment is confirmed by the union. Formerly many of the least skilled help were laid off altogether during the off seasons. The rest of the help spent their time in the factories, working when an occasional garment order came in or simply waiting. On September 10, 1914, an agreement was entered into by the Garment Manufacturers' Association and the union that provided that whatever work there is during the off season shall be divided equally among all the employees in the unionized branches of the industry. The outcome is that, during the off seasons,

approximately the usual quota of employees is in the plant, but they spend four times as long waiting for a garment to appear as they do working on the garment after it is in their hands. Not many of the employees secure any other work in the off season. A few get employment in the department stores during the Christmas rush.

During the last year or eighteen months, changes in fashion have become much more frequent. No longer has the rule "one style, one season" held. During the fall of 1914 there were four distinct changes. These were noticeable in the great variety of coats and suits worn by women. Styles followed on the heels of each other so fast that it was impossible for women to keep up.<sup>1</sup>

This situation means complete disorganization of whatever regularity there has been in an already irregular business. Buyers buy sparingly of each style in anticipation of a new one. The season is, therefore, very short. When a new style appears, there is another sudden batch of rush orders to be pushed out under high pressure,—and then, stagnation. Two long seasons have been chopped up into a number of short seasons. It is now impossible for the wage earner to know what pay he will receive, or for the employer to know what business is in sight for him. Neither can plan ahead. To attempt this and trust to hitting the next fashion is so unsafe as to be a gambling proposition. The statement of a ladies' dress goods manufacturer (in which business the situation is analogous) will describe the situation. "One year I took a chance and made up goods ahead of the style. I happened to hit it right and made \$85,000. I would hate to say what happens other times when I miss it." It is claimed by the secretary of the Women's Garment Manufacturers' Association that the introduction of idle periods into what was formerly a steady working period has added three or four weeks a year to the period of unemployment.

Both the union and the manufacturers' association report that an attempt was made during the last year to bring about

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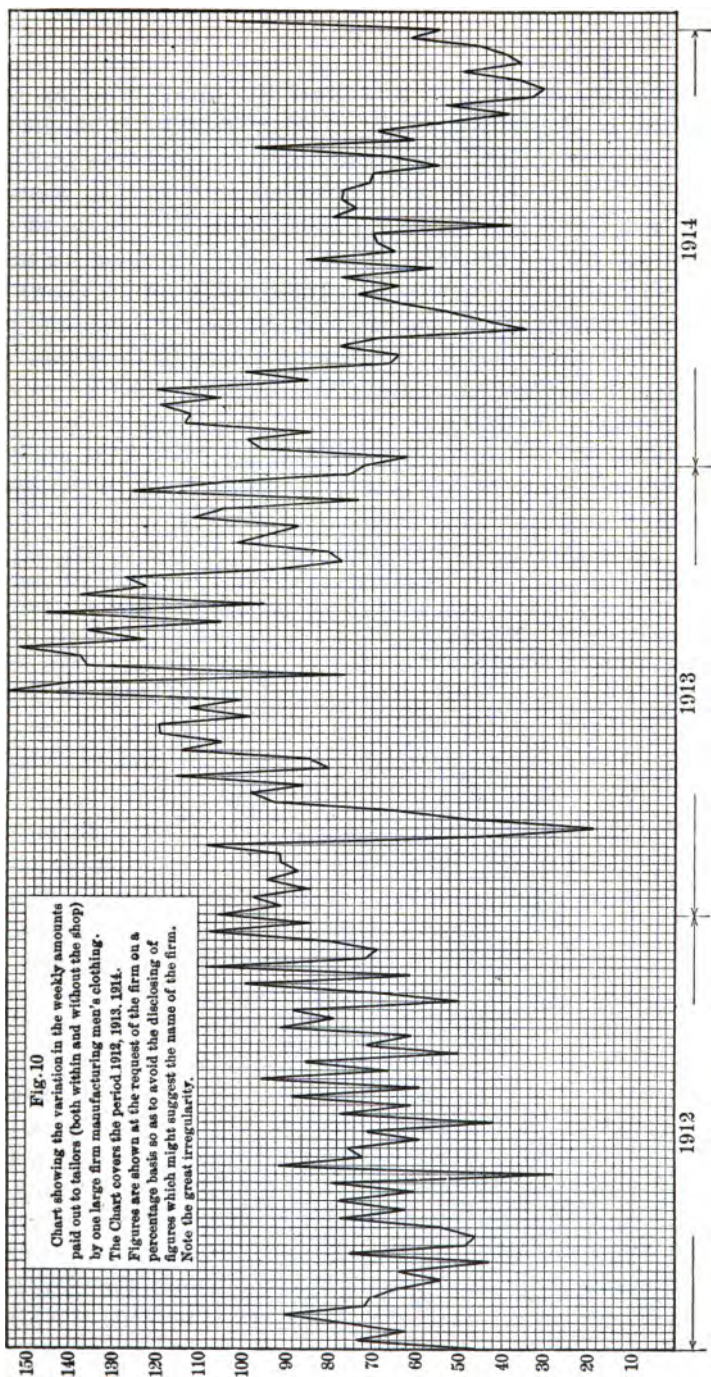
<sup>1</sup>It is asserted by those studying the unemployment situation in New York that it is impossible for the average employee in the women's clothing industry to work over 50 per cent. of the time, because of the excessive irregularity.

an agreement among the manufacturers in Philadelphia, New York, Chicago and Cleveland, that they should decide on one style for a season and stand by it. This attempt to bring about stability in the business and to make employment more regular failed because of mutual suspicion among employers. Most employers claim that frequency of style changes is due to the two or three large manufacturers in New York, who set the style and change it often so as to increase sales of their own goods. Others assert that it can be charged to the large department stores who knock down a style shortly after it has been created, and set up another so that buyers will be stimulated to purchase over again, in order to "keep up with the style." The answer of each department store, of course, is that it is forced to follow the example of its competitors.

While the seasons in different branches of the women's garment industries do not coincide, all concerns lose a proportionately large percentage of the annual time. A manufacturer of ladies' shirt waists employing several hundred hands has the following to say regarding the irregularity of employment in that industry and the influence that extreme styles have on regularity of employment:—

We run almost to capacity from January to June. From June to January we run at practically 50 per cent. capacity. We are especially slack from June to October. Conditions used to be such that the irregularity always characteristic of our business was a constant thing which we could predict in advance. Knowing when it occurred, we could sit up nights and plan against it, and figure out some way to reduce irregularity in production and employment. We could furnish employment during our dull seasons by manufacturing to stock. Shirtwaists were fairly well standardized and there were no extreme styles. Orders would come in ten months before delivery was required, and the plant could manufacture fairly regularly since it could make up these orders whenever convenience demanded. Frequently we could make up stock in the off season till we would have 100,000 shirtwaists piled up which we would work off in the buying season. Frequently we would make from ten to twelve thousand waists without an order. We knew that the worst we would have to do would be to simply swap dollars. Nowadays, we rarely make over twenty-five garments without orders.







Although it is widely considered that men's clothing is so standardized that there can be little irregularity of production due to the variety of cloth and style, it is nevertheless true that the style-irregularity is only somewhat less than in women's clothing. The off seasons are less than half as long as the off seasons in the women's clothing business. How irregular the men's clothing business is, may be seen from fig. 10, which shows the weekly variation in the amount paid out by one large and representative men's clothing concern to tailors both within and without the factory. This represents the approximate variation in employment furnished.

One large manufacturer who makes a very high grade of clothing, a business which is subject to style changes, writes as follows:—

Women's fashions play a more important part in dictating men's styles than ever before and, as a consequence, we have had more rapid changes in style than the average manufacturer does keep up with. These changes are not confined to the design of the garment alone, but the fabrics also, so that what applies to the clothing manufacturer might be said just as strongly of the fabric maker.

### *C. Industries Manufacturing Electric and Steam Railway Equipment and Ships*

The third great industry that, in the long run, adds most to unemployment in the Philadelphia district is that group of industries which supply equipment to railroads and steamboat companies. The railroads and steamboat companies are notoriously irregular buyers. They buy in a lump. When conditions are favorable to them, they buy vigorously. When the reverse holds, these companies, especially the railroads, buy scarcely nothing. Since there are in the neighborhood of 40,000 persons in these industries in and around Philadelphia, a severe curtailment of such purchases is sufficient to affect seriously, if not altogether withdraw, the usual means of livelihood from a number of persons probably considerably in excess of 100,000. Cutting off the buying power of so many people is alone sufficient to create "hard times" in Philadelphia. This situation partly explains the statement of a prominent local manufacturer that Philadel-

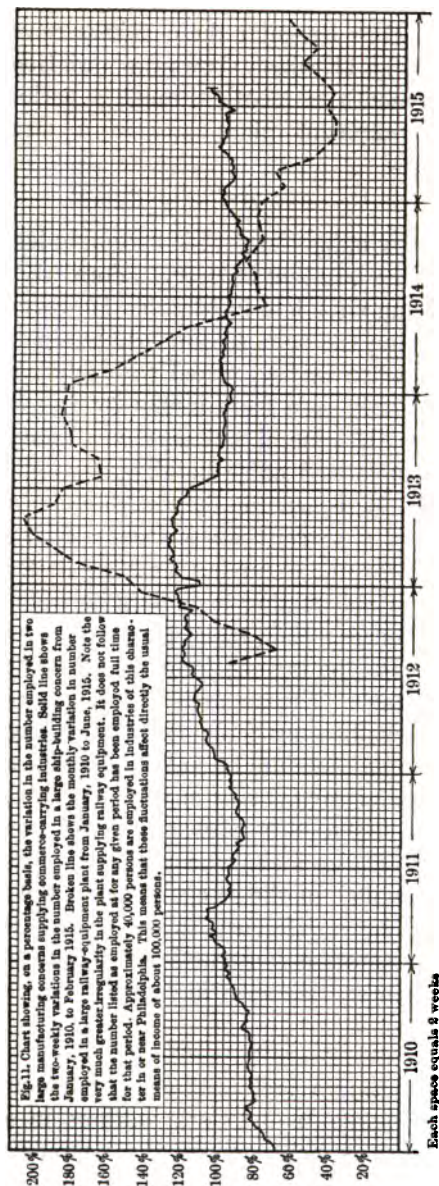


Fig. 11. Chart showing, on a percentage basis, the variation in the number employed in two large manufacturing concerns supplying commerce-carrying industries. Solid line shows the recent variations in the number employed in a large ship-building concern from 1910 to 1915. Dashed line shows the recent variations in number employed in a large railway equipment plant from 1910 to 1915. It is to be noted that the number listed as employed in the plant supplying railway equipment. It does not follow that the number listed as employed at for any given period has been employed full time for that period. Approximately 40,000 persons are employed in industries of this character in or near Philadelphia. This means that these fluctuations affect directly the usual means of income of about 100,000 persons.

Each space equals 3 weeks

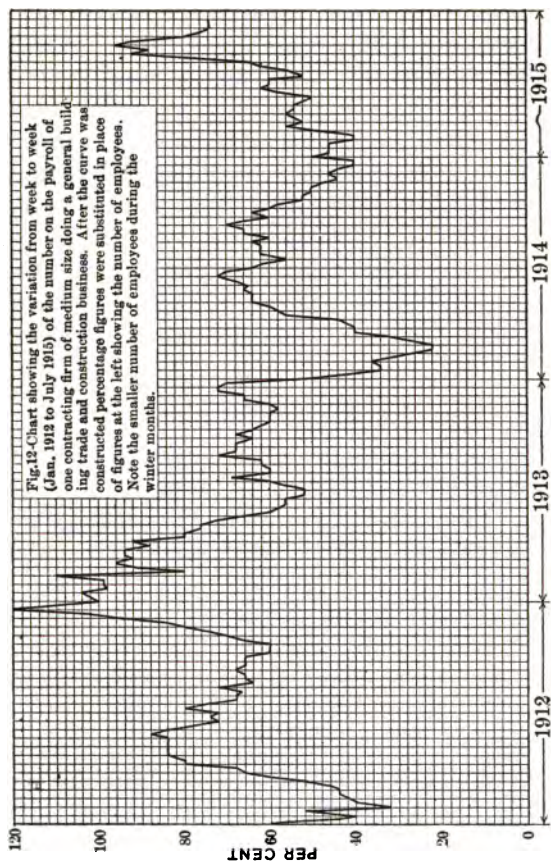
phia is always either on the "top crest of prosperity or far down in the dumps." How irregular these industries are may be seen from a glance at fig. 11, which shows the variation in the number employed from month to month through a period of years in a large railway equipment plant and in a large shipbuilding concern.

#### *D. The Building Trades*

One of the few industries that is becoming less irregular than it used to be is the building industry. Formerly little was done from Thanksgiving until late in March. However, the use of cement is lengthening the open season for certain lines of building work. Cement, when heated, mixed with gypsum and protected by salt hay, is fairly safe from injury by freezing, even in the coldest weather. If general business conditions are good, the builders of factories and office buildings are coming more and more to show little regard for the weather by running straight through the winter (except for an occasional severe day),—witness the Ford Motor Company building at Broad Street and Lehigh Avenue. Cold weather is more to be reckoned with in the construction of houses and in street paving and sewer work. Not much work of this type is done from the middle of December to the last of February. The unemployment that results from this cause is less serious because the period is not long, is well known in advance, and can therefore be provided against. It is claimed that the influence of irregularity in work is offset, for the skilled mechanics, by a higher rate of wage. This, however, does not apply to the unskilled men, who are the hardest hit here as elsewhere. Some idea of the irregularity in the building trades may be secured by a reference to the fluctuations in employment of a representative construction company doing a general construction business, as shown in fig. 12.

#### *E. The Longshoremen*

It is a well-known fact that chronic unemployment exists among the longshoremen and dock workers in any large port; and these conditions hold among the negroes and Poles and southeast-European dock workers of Philadelphia. In the



absence of exact statistics, the statements of superintendents of labor of steamship companies and the heads of docking concerns throw the best light on unemployment among the dockmen. The head of one stevedore firm says,—“If every steamship company were employing to-day as many dock-hands and longshoremen as it employed on its busiest day last year, one-half of the dock labor would still be idle.” Another says,—“I do not believe that the dock-hands average over two days a week.” Although the wages per hour are relatively high,<sup>1</sup> the time lost is so great that the average weekly wage is low. In view of this lack of statistics for Philadelphia dockmen, the statement of the situation in New York may be taken as probably fairly typical of Philadelphia. Both employers and employees in New York testified before the Federal Industrial Relations Commission that the men earn on an average of from ten to twelve dollars per week. This irregularity tends to produce shiftlessness and dissipation in the workers.

#### *F. Agricultural Labor*

Agriculture is one of the most notoriously irregular industries in its demand for labor. This is particularly true on the farms that lie to the east and south of Philadelphia, in the sandy coastal plain portions of New Jersey, Delaware and Maryland. In these sections, the chief products raised are truck and vegetables. The cultivation and harvesting is done by hand to a much larger extent than is the cultivation and harvesting of most farm crops. As a result, South Jersey and Delaware have a very high demand for labor during the summer and fall. The extra demand Philadelphia and Baltimore are called on to supply. Every summer, whole families (chiefly Italians) migrate to the fields of South Jersey and Delaware in late May or early June, as soon as, or even before strawberries are ripe. Many of these families migrate from one section to another as the different crops in different sections ripen. Some remain till the end of the cranberry season late in October. These families then return to Philadelphia. After a bad winter, this exodus to the truck and berry field

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<sup>1</sup>Thirty cents per hour, forty-five cents per hour for overtime up to midnight, and sixty cents for overtime after midnight and Sunday.

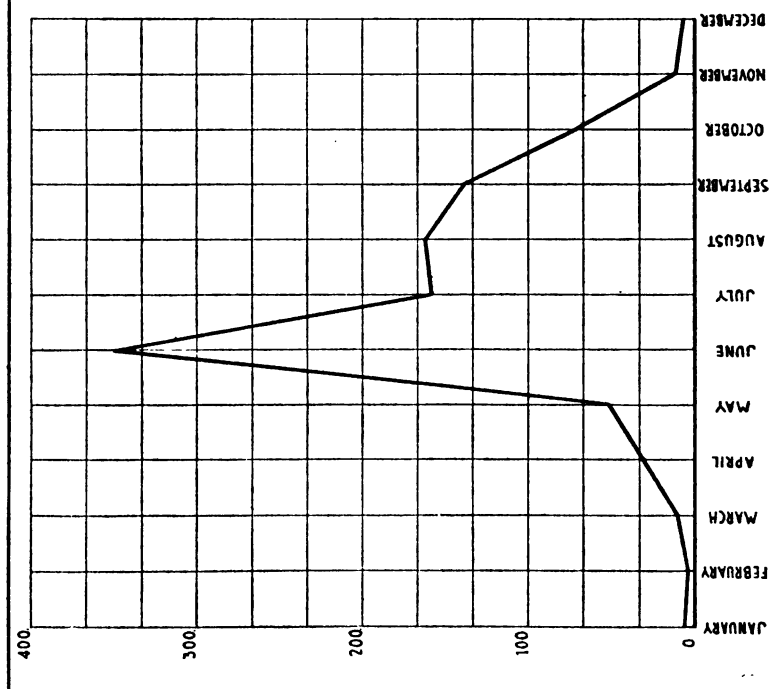
helps to relieve Philadelphia's unemployment problem. Stated the other way, however, although many of those returning in the fall to Philadelphia, find employment in clothing factories, construction gangs, etc., it is apparent that these returning thousands are dumped on to the city's labor market just when winter is approaching and when the industries are least able to absorb them.

The extent of the irregularity of employment on the truck farms may be seen from a curve showing the variation in employment on truck farms in South Jersey during the year 1914. Letters of inquiry were sent to a large number of farmers selected at random in South Jersey. The curve in fig. 13, showing the monthly variation in employment on a number of truck farms in South Jersey during 1914 was constructed from the answers received from these inquiries. Note also, on page 153 of the appendix, a letter, etc., received from a cranberry grower in South Jersey.

Closely akin to the irregularity in the demand from South Jersey and Delaware for agricultural labor is the demand of the fruit and vegetable canneries for practically the identical kind of labor. The South Jersey, Delaware and Maryland section is one of the biggest centers in eastern United States for the canning of fruit and vegetables. The majority of these canneries, which employ thousands of hands at the height of the season, run from two to five months every year. A large part of their help is drawn from Philadelphia and Baltimore in the spring and return there in the fall.

#### *G. Department Stores*

Employment in department stores is characterized by a considerable amount of seasonal irregularity. The high season occurs from Thanksgiving till Christmas. After the Christmas rush the number of employees usually declines until the last of February or March. During April and May the number is slightly increased in order to handle the sales of goods for the summer season. Employment during the summer season falls off, the low points being reached during July and August. The situation in the department stores is very well summarized



**FIG. 13.**

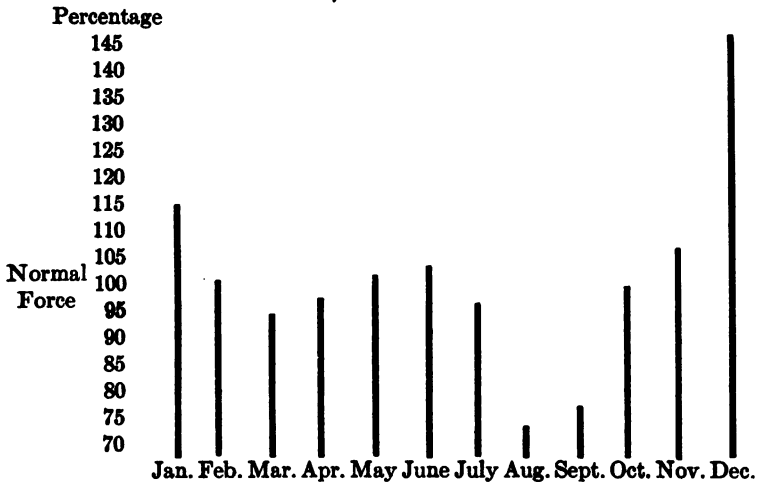
Chart showing the monthly variation in number employed on ten truck farms in South Jersey during 1914. Note the heavy demand for labor in summer and the almost complete absence of demand in winter. It is this irregularity in demand that takes thousands of Italians from Philadelphia during the spring and summer,—to return again in the winter when the city's industries are normally at the lowest ebb, and are therefore, least capable of absorbing this labor.

in a study made by the Philadelphia Consumers' League, and published as a bulletin of the State Department of Labor and Industry:—

#### REGULARITY OF EMPLOYMENT

The following chart, showing the variation from the normal in the number of employees in one large department store, at different seasons, shows a condition which is probably true of the four other large stores. The month of May, when this store considered its force about normal, has been taken as 100 per cent.

*Percentage Fluctuation by Months in the Working Force of One Store.*



The month of December shows a 42 per cent. increase in the normal force and August a 27 per cent. decrease. This indicates plainly the number of temporary and intermittent department store workers at the command of any large store for busy seasons. Many girls work in the stores from September until Christmas eve or until January first, when a falling off of trade demands a cutting down of forces. Hundreds of employees are dismissed Christmas eve in every large store. A few of these workers will be reengaged December 27th or 28th and kept through the January sales. A toy department that has normally 12 women, had 350 just before Christmas. About three hundred are dismissed December 24 and the others are gradually dropped during the next month until reduction sales and stock inventory are over. In March or April again extra workers will be taken on for two or three months.



Upon the examination of the records of 456 saleswomen in one store, for a period of 16 weeks from June to September, it was found that many saleswomen take some voluntary vacation beyond the paid week. The better paid women are out from one to nine weeks. The group considered had all been in the employ of the house at least one year and they averaged  $7\frac{1}{2}$  days' absence beyond their paid vacations in this summer season alone. Of those who were earning \$8 and above, the largest proportion, or 55 per cent., were out one week and more beyond the paid week, as against only 40 per cent. of those earning under \$8. In one department store regular saleswomen and six-day contingent sellers are given only three days' work a week in slack seasons.

Despite this great irregularity of employment that appears on the surface, department store unemployment is made less serious in that a number of those laid off at the Christmas season regularly return to other work, which they have temporarily left in a slack season. For example, many of the stores keep a list of addresses of people whom it regularly calls on during the rush seasons. The help needed in certain departments is drawn from the wholesale departments of the store to the toy, book, jewelry, etc., departments who need extra help. The second large source of help is by securing traveling men who usually are not very busy during December. The busy season of these persons comes while the stores are stocking up before the Christmas rush. A man who, for example, has been a traveling jewelry salesman, then becomes a jewelry salesman in the department store, etc. In the third place, department stores secure help at Christmas from the small tailoring shops, whose busy season just precedes that of the department stores. Moreover, many of those laid off at the end of a busy season are persons such as married women, school students, etc., who utilize this opportunity to earn some "pin" money. Although a considerable amount of time may be lost by those laid off by the stores before they are needed at their old positions, department store unemployment is made less serious by this dovetailing of trades which assures steadier employment.

### *H. Labor Union Statements*

In order to throw as much light as possible on the amount of unemployment in Philadelphia industries, letters were sent by the Director of Public Works to each union affiliated with the Central Labor Union. One of the questions in the letter asked the amount of time lost by the average member. This query was designed to indicate the amount of normal unemploy-

ment there was in different trades. Unions were asked to answer this question only if they had records. The tabulated results of the limited number of answers received are as follows:—

<i>Union No.</i>	<i>Time annually lost by average number</i>
1	About 8 months (only those temporarily employed considered)
2	4 months
3	10-12 days
4	2 months
5	3 days a week
6	half time
7	7 months
8	3 months
9	none
10	2 months
11	about 2 months

These answers represent but a small percentage of the labor unions in Philadelphia. As a rule, we may assume that those with the largest amount of unemployment were most ready to answer. Even allowing for this and for any mistakes in the estimates, the abundance of unemployment is apparent.

### *I. Miscellaneous Industries*

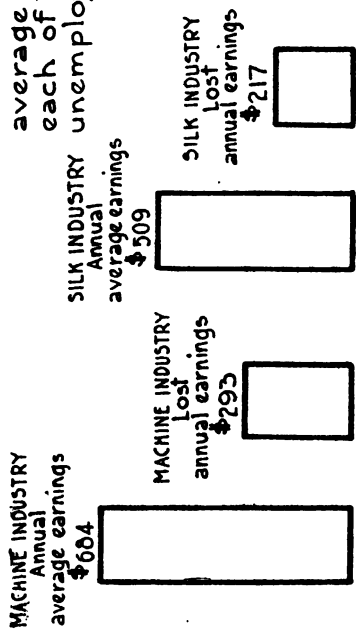
The preceding is not intended as a complete statement of unemployment and irregularity of employment in Philadelphia industries. Only the largest of those in which unsteadiness of employment exists were selected. A long list of industries might be named, in which for one reason or another, conditions are much the same. Surely enough has been said to prove the existence in Philadelphia of a serious unemployment situation—firmly rooted, growing, detrimental to employer, worker and community, even in the best of industrial years.

Interesting, in considering this situation,—since the conditions in one community are usually parallel with those in another,—are the results of studies made outside of Philadelphia. The results of a few of these studies are shown on pages 154-157 of the appendix.

**FIG.14.**

The New Jersey State Department of Labor estimates that New Jersey factories lose 30 per cent of their capacity output through unemployment

The Figure shows the actual average annual wage for the machine and for the silk industries, also the annual average wage presumably lost in each of these industries through unemployment (After C.E Reitzel)



## PART II—THE COST OF UNEMPLOYMENT

### TO THE EMPLOYEE

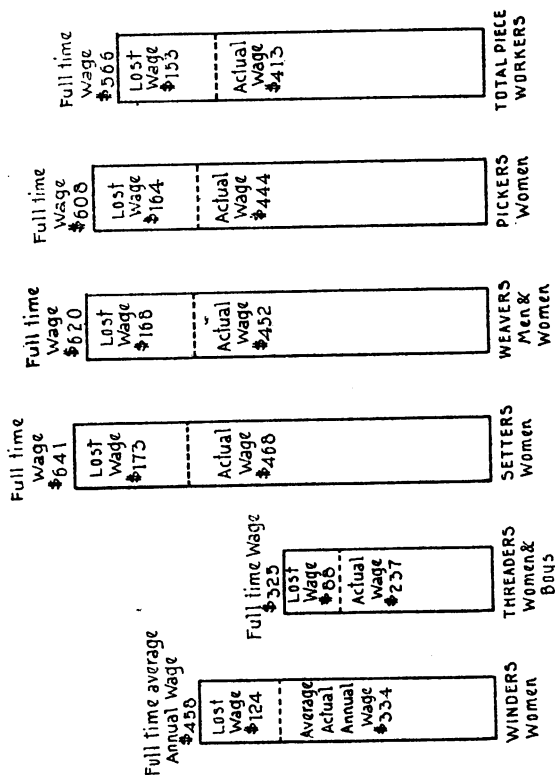
Little though we know of the facts of unemployment, we know even less of its social cost. We do not realize how deeply unemployment penetrates, and how seriously it threatens, our community welfare. Although unemployment affects every interest in the community, the burden falls most heavily on the working classes. When out of work the average member of the working class loses his chief means of support. It is, therefore, a matter of life and death to him.

The most immediate and vital effect of unemployment on the worker is a very serious reduction of the wage scale. Enough has been said to show how greatly unemployment reduces the pay received. In the absence of any general information for Philadelphia industries, an investigation made in New Jersey will best serve to indicate, in a general way, the extent to which the wage scale is depressed by unemployment. Figures collected by the New Jersey State Department of Labor from firms employing over 21,000 workers in the machine industry and from firms employing nearly 16,000 persons in the silk industry show that each of these industries worked during the normal industrial year of 1912 at approximately 70 per cent. of total capacity. The actual average wage received during the year for the machine industry was \$684; for the silk industry, \$509. If full time had been made, it follows that an increase of over 40 per cent. would have resulted. This would have meant an average annual wage for the machine industry of \$977; for the silk industry of \$726. This result is shown graphically in fig. 14.

Similar figures compiled by the Mayor's Commission on Unemployment in Chicago in 1913-14, are shown on page 157 of the appendix. It has been shown that in Axminster Carpet Mill "A", in the last four years, employees lost at least 27 per cent. of the normal working time since that much of the

FIG.15

Chart showing actual wage received by piece workers in different departments of Axminster Carpet Mill "A". Also what the average annual wages would have been in those departments if working time lost (outside of mill) had not been lost. Since these figures include only working time lost outside of mill by those on the payroll, and does not include time lost in the mill waiting for dye or material, and does not include time lost by those laid off entirely from the payroll in slack times, this chart must represent a very considerable understatement of the amount by which the wage scale of this one firm is reduced through unemployment.



time was spent outside of the mill. The actual average annual wage received by piece workers in this mill was \$413 (based on statistics compiled for the entire force from April, 1911, to April, 1912, and from July, 1914, to April, 1915). If this 27 per cent. of time had not been lost, the average annual wage would have been \$566. The average annual loss of wage per employee through unemployment was at least \$153, and was probably much more, if time lost waiting in the mill, and time lost by those laid off, were included. Stated for individual departments, the actual average annual wage and the lost wage per employee would be as follows:—

	<i>Actual average annual wage</i>	<i>Average annual wage lost through lost time spent outside of mill</i>
Winders.....	\$334	\$124
Threaders .....	237	88
Setters .....	468	173
Weavers .....	452	168
Pickers .....	444	164

These results are shown graphically in fig. 15.

In short, the worker loses the opportunity of earning 100 per cent. of what his energies and abilities warrant. Permanent or chronic unemployment means a permanent loss of wage. In essence it means that the family of a man with a \$1,000 or \$1,200 earning ability cannot profit by or live according to the standard of such means, because the man is actually earning only from \$500 to \$1,000 a year. Not merely does unemployment seriously reduce the income of the worker; it makes his income decidedly irregular. Regular income is interrupted by periods of total or partial stoppage of income. In times characterized by such unusual industrial depression as of the past winter, the loss of income is complete on the part of thousands. To a large degree, the worker is entirely ignorant when such misfortune will befall him. Such a situation almost forces the worker to lead a hand-to-mouth existence. He hesitates to plan ahead, because he never knows whether he will be able to carry through his plans or not, for fear of an interruption of income. A premium is, therefore, placed on the lack of thrift.

When the normal income returns after a famine period, it not unnaturally leads a family to spend extravagantly after the strain of pinching through a hard time, just as human nature always has, from the days we were savages, led us to indulge in an orgy of feasting after a long fasting. Unemployment and irregular employment are the arch enemies of thrift.

Perhaps the most serious industrial result of unemployment is its effect on the quality of the working people. It makes good workers bad. It turns workers who were capable and willing into men who are neither capable nor willing to hold a steady job if they could get one. As one man with whom I talked when he was out in front of a hosiery mill at the noon hour, said, "For six months before this month, we have been working from 8 to 3. When we came to go back to the old hours (7 to 5:30) it seemed at first as if we just couldn't make ourselves get up an hour earlier and work two hours later."

The utter inability of the workers to understand or to change the situation breeds a fatalistic lack of hope that soon manifests itself in a lack of ambition and effort. The secretary of the National Lace Weavers' Union says, "The lace industry has made more bums than any industry I know of. I have seen men go into the mills only to work an hour this morning or an hour this afternoon, so long, that they are incapable of sustained effort. They lose their personal "punch" and often eventually lose their ability to discuss anything except how things are this week in this or that plant."

One of the usual ways by which such a depression leads to a debasing of the worker is by causing the skilled man to drift into an unskilled trade. When a man is out of work, he is very apt to "take anything" that offers, whether it is a job in which he can utilize his skill or not. The very common result is that he is never able to "come back" to his own trade. His ability in his particular trade is sacrificed and he drifts into the already tremendously overcrowded class of unskilled men. Not only the worker but the entire Philadelphia community as well, is the loser by this lowering of the skill of labor.

The injury to the worker by unemployment extends beyond his mere industrial efficiency, and dangerously affects the social standing, the family relations, the health, the intelligence and the public orderliness of the working classes of the community. A series of interviews with Kensington textile workers (chiefly Anglo-Saxons) is one steady story of used up savings, of increased debts, and of "half time" for four, six or nine months during the past winter. Even the few whose greater savings or "steadier time" would normally have led them to avoid the "pinch" of the past winter, have felt obliged to lend to the less fortunate to an extent, which, in many cases, has meant a severe drain on their own resources.

The lowered income during such a winter as the past very frequently means the curtailment of the necessities of food, fuel and clothing, to the point where the health is seriously impaired. It is almost impossible to measure this injury. Mr. R. R. P. Bradford, who is in charge of the "Lighthouse" and was quoted previously (page 17), said during the spring of 1915, "I should not be at all surprised if, as a result of the lowering of physical vitality among the Kensington workers, because of insufficient nourishment and protection, there should come about an epidemic of disease that will cost us dear. Whether it does or does not happen, we have a permanent injury as a result of this year's unemployment in the lessened vitality of the people."

Every severe depression is a great destroyer of family life. Almost every family with whom I conversed knew of two or three families that were forced to "break up" because of the unemployment during the past winter. One of the usual results of unemployment is a considerable increase in the number of thefts, burglaries and suicides. The figures of Table I show how these crimes have increased in Philadelphia during the winter of 1914-15, when unemployment was serious. Note also the increase of suicides during the winter of 1907-08,—the year of the last severe depression.



TABLE I—EFFECT OF UNEMPLOYMENT ON SUICIDES AND CRIME  
Number of crimes committed during three winter months of

	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15
Suicides	43	60	50	61	61	48	62	65	74
Larcenies	—	—	—	—	—	—	—	1,068	1,227
Burglaries	—	—	—	—	—	—	—	32	44

While other causes may have contributed to this result, it seems obvious that severe unemployment must have been an important factor in the large increase for the present winter and for the winter of 1907-08.

The superintendent of truancy reports a much larger number of students remaining away from school on account of the lack of fit clothes than in any recent winter. Only a teacher can appreciate the effect of irregular attendance on the progress of students in a class room.

Typical individual cases convey more clearly the situation in Kensington during the past winter than statistics. A few of these are, therefore, given.

Two English brothers, who have been in this country three and seven years respectively, are married and live in the same house. Both are cloth weavers and have worked at the same mill since their coming to America. The story of Kensington is summed up in the statement of the elder:—

During the last five years I have not worked full time more than half the time. At our mill we usually work five or six months steady, and then part time the rest of the year. In the entire seven years I have been here, eighteen months was the longest steady run we ever had. This winter business has been unusually bad. We have worked half time ever since Christmas (the date of the interview was in July).

If we had had any children like the rest, we'd be up against it like the rest of them. Anybody with children is certainly poor. It isn't because we don't want children, but things are so that if you have two or three children, it takes all you are able to make in good times to supply the necessaries; then when bad times come, you are up against it. If next winter is like the last, a lot of the people we know will have to live on borrowed money, or go under. I have loaned \$25 in the last nine months. My brother

loaned \$33 of which he has had \$16 returned. You can't get credit here in a bad time like you can at home. Things are more irregular than they are at home. If we had any children to support, we would go back at once.

The native intelligence and honesty of this family were evidently of high calibre. The fact that they have worked three and seven years respectively at one mill is evidence of their industry.

Frank Ball, a day hand in the Axminster Carpet Mill "A", is described by his foreman as being steady and capable and industrious. Ball says:—

I have a wife and three children,—12, 9 and 6 years old. Prior to last fall, I had \$300 saved up. I get \$2 a day, but since June, 1914 (this interview was in June, 1915), I have averaged less than \$8 per week. My rent costs me \$13. My father, who lives with me, has been sick, and this, combined with bad times, has used up our savings till we are now \$65 in debt. I owe a bill at the clothing store, and I still owe for one of the five tons of coal I bought last year at this time. Now it's time to buy some more.

I don't know what I'd done if I hadn't had a more economical wife than most men. She makes over her old clothes so that they look like new, and when she can no longer fix them for herself, she makes them into clothes for the children. They look neat, too. My wife hasn't had a new dress since 1912.

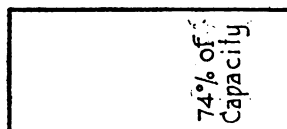
During this winter, I tried not to let a dollar get away from me if I could help it, and took odd jobs here and there whenever I could get it on the days there was no work at the mill. Once we were shut down for five days on account of the death of a member of the firm. I heard of a job at King of Prussia (a village 17 miles out in Chester County) and went out and got a job there on a farm. I painted some steps, and did other odd jobs about the place. Even at that we could hardly get along.

A lot of families I know of broke up; one right across the street sold their furniture and separated to live with each other's folks. It will take a lot of people two or three years to get over this winter because a good many of them had to borrow money on their furniture. When the bills came due they were unable to make payments, and they lost their furniture.

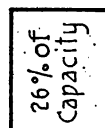
What famine and black plague were to the middle ages, so is unemployment to the modern industrial world.

**FIG.16.**

showing in terms of output the time lost in 2556 employing concerns in New Jersey during the industrially normal year, 1912. In dollars, this meant a loss of \$563,000,000.



Actual Output



Lost Output

## COST OF UNEMPLOYMENT TO THE EMPLOYER

Unemployment involves a far-reaching economic loss to employers, even though it does not so immediately affect their welfare as it does that of workers. However, it gravely endangers the welfare of any industrial community. It is a constant menace to an industrial center in its competition for trade with other centers.

Corresponding to the reduced wages of the employee is the reduced output of employers. In the absence of any comprehensive statistics bearing on our loss of output through unemployment, the statistics gathered by the New Jersey State Department of Labor and Statistics show a situation which may be taken as fairly typical of Philadelphia. Figures collected by the State Department from 2556 firms show the actual output for the year 1912. They also show the output for those plants if "all the existing facilities were brought into use." These latter figures are estimated by the firms themselves. They show that for the normal industrial year of 1912, these plants were running only to 74 per cent. of their capacity. Stated in terms of lost output it meant a loss of \$363,000,000. Shown graphically the situation may be stated as in fig. 16.

The complete loss to employers is not to be stated solely in terms so simple and obvious as in lost output. Perhaps deserving of higher rank than the loss of output is the loss experienced by employers in demoralization of organization. In answer to a question sent by letter to the managers of six representative mills in Kensington, five answered that they regarded unemployment or slack time as the chief causes of the rapid shift of employees from shop to shop. As one employer puts it, "We found that, while our men could make \$3 or \$4 a day when they worked, they rarely did because of the time that was lost through slack orders, waiting for changes in the dyes, etc. As a result, they were dissatisfied and we couldn't hold our best men." Another firm states the proposition conversely by saying, "We can keep our help and, incidentally, get the best help of our class, not because we pay a higher rate of wages,—for as a matter of

fact our rate is somewhat lower,—but because we guarantee our help steady employment and our twenty-five years' reputation bears out our claim."

An electric company (outside of Philadelphia) has the following to say regarding the demoralization of the working force through unemployment:—

It is realized by most manufacturers that not only is unrest and dissatisfaction produced among the working force by irregularities in production, but that there is a direct monetary loss of a considerable amount. This is especially true in industries which are conducted very largely by so-called unskilled labor which have to be taught how to perform the work on which they are employed as distinguished from work which is done by recognized trades. To illustrate, in a locomotive or general machine shop when work increases, more machinists are employed. These men, being trained artisans, are familiar with the work which they are employed to do and are immediately productive. In work similar to our own, unless we are fortunate enough to recover all of our old employees, which is never the case, a bulge in production requires the hiring of large numbers of unskilled men and women who have to be taught the various classes of work which are peculiar to our business. This training and development in the different departments requires all the way from a couple of weeks to six months.

Where industries operate under this latter condition, the cost of securing new and untrained employees after a depression may amount to as much as from \$25 to \$40 per employee, this cost covering the cost of hiring, the cost of training, the work spoiled and the tools damaged during the process. It is aggravated by the fact that all the newcomers do not stick, so that to get one proficient employee in the end you have perhaps started with three, four or five and taken them part way through the training process.

Further reference will be made later to this flow of labor through shops. It is sufficient to say here that this rapid shifting of labor means a generally lower development of skill on the part of workers and, in the second place, the almost constant presence in the shop of an unusually large number of greenhorns.

The loss of efficiency does not stop simply with the lost skill of those who leave. The manager of one of the largest tool making concerns around Philadelphia, says, "After a period of unemploy-

ment, it takes the employer three weeks to get his force and plant up to the point where it can turn out orders with normal efficiency. During the slack times it has run down at the heels." The foreman of Axminster Mill "A" says, "Even if the same weaver comes back to the same loom, after a long period of lost time, it takes three weeks before the loom will run again as well as it did before we shut down."

More insidious than these losses to the employer is the loss during periods of unemployment through the degeneration of the workers in spirit, energy and ambition. As one employer writes: "Working men or working women who, through no fault of their own, are deprived successively time on time of the opportunities to realize their earning capacities, inevitably suffer impairment of courage, self-respect and even normal fibre, the loss of which falls first upon the community, but eventually upon industry, in the depreciation in quality and spirit of the labor supply." Philadelphia has been known as the best labor market in the world. Unemployment does not tend to keep her so.

Finally, unemployment, if widespread, knocks the props out from under a market that may already be sagging, because it tends to diminish the buying power of the community, so that industries which might normally be ready to start again, are discouraged from beginning.

One progressive Philadelphia employer sums up the injury by unemployment in their forging and finishing shop as follows:

When our factory begins to lose time and works on reduced hours, the first thing we notice is breaking up the personnel of our working force. Our best mechanics, who are capable men, begin looking around for other positions. As these men are in the minority, their loss is keenly felt, as quite often one man will be the backbone of a gang of three or four, and his loss is very severe both in efficiency of production and in quality of work. High grade men have less trouble in obtaining other positions under normal conditions than the inferior grade of workmen, and unless a great deal of care is exercised during times of depression, a factory is liable to be left with their less efficient men on hand.

With the loss of any of our men it seems that we must break in new men for the work. If we are running our regular output on a piece work system, as we do here, it simply means

that the new men, not having the knowledge sufficient for efficiency, cannot be put on a piece work basis and it is necessary to start him on time work, raising the cost per unit from 5 to 10 per cent.

New men, likewise, turn out more bad work than is usual, and this work is either an absolute loss or must be worked over again at an additional expense. This item, while not large, is simply an added burden to our cost.

In our plant where material cuts such a figure we likewise find that replacing regular men with new men means that they waste material. The difference between the waste of a bar used for a given product and the actual finished product is termed scrap in our cost keeping, and we have figures showing that these men produce 10 per cent. more scrap than the average workmen should do. In other words, they use 10 per cent. more material to produce a given piece of product than is necessary.

More supplies are used up with new men than with old, first, because they do not know how to handle them and waste them, and secondly, they produce more bad work which has to be re-finished. The first lot of supplies used by new men in making the finished product is lost entirely.

Regarding the last paragraph of your letter which asks for definite figures showing the difference in cost per unit when our factory is running at 100 per cent. capacity and when it is running at 75 per cent. capacity; on the latter figure our factory cost per unit is 20 to 22½ per cent. higher than at full capacity.

The reason for this, of course, is that when you are cutting down the productive capacity it is very hard to reduce to a minimum your force of engineers, foremen, inspectors, firemen, truckers, and such incidental labor, and your general overhead expenses are to a great extent stationary.

### PART III—THE INCREASE OF KNOWLEDGE ABOUT UNEMPLOYMENT

What should we do about unemployment? It is obvious that we will not comprehend and cannot intelligently attack a problem that goes as deep into the industrial organization of society as does unemployment, so long as we know so little about it as we do now. The scantiness of our present knowledge of unemployment has already been pointed out. It does not enable us to attack unemployment much more successfully than did the ancient physicians attack physical illness in the days when medical science consisted only of a series of magical spells and potions. Our most fundamental need at the present time in attacking unemployment is to know something about it,—its facts, its causes,—and its significance.

It was with the object of contributing more definite information to our knowledge of Philadelphia's unemployment that the City of Philadelphia invited the Metropolitan Life Insurance Company to conduct an unemployment canvass among its policyholders during the past winter.

Unfortunately this information, while of invaluable aid in throwing light on the amount of unemployment in the past winter, is of little help in throwing light on the actual amount of unemployment that may exist at any time in the future.

As a means of supplementing the Metropolitan canvass arrangements have been made with the State Department of Labor and Industry that it should collect at regular quarterly intervals, statistics of unemployment and employment in Philadelphia which will give a usable, even if inadequate, basis for estimating the amount of unemployment there is at any particular time in the future. The names of 250 manufacturing concerns, chosen so as to be as nearly typical of all sizes and kinds of manufacturing industries as possible, were submitted by the Department of Public Works. The plan provides that the Department of Labor and Industry will collect monthly



statements from these firms and compile the figures, showing for one particular week:

1. The number employed,  
     Full time  
     Part time  
     At normal operating capacity
2. The number of hours worked per week
3. The total payroll (excluding salaries),—  
     Actual for week of  
     When running to capacity

These statistics should furnish a fair basis for estimating the variation in and amount of unemployment in the important manufacturing industries of Philadelphia at the canvass periods. By properly "weighting" the statistics for each different industry, according to the importance of that industry in the city as indicated by census figures, it will be possible to form some idea of the extent of unemployment in Philadelphia manufactories, as a whole, at these canvass periods. The industries selected and the "weight" numbers assigned to each are found on page 155 of the appendix. In order not to disclose the business conditions of individual firms, the names of the firms from whom figures are collected are not given. Since Philadelphia is basically and pre-eminently a manufacturing city, these figures will be sufficiently representative of the city as a whole to furnish a usable, though inadequate, clue to future conditions. As a result, we should not be in the future in such a quandary—whether unemployment is serious enough to justify ultra-heroic measures—as we were in the past winter.

These two sets of statistics will furnish but the barest outline of the knowledge we need. Over and above general data, we need the closest and most detailed analysis of the causes, extent and effects of unemployment in each important industry. It is only by such studies that we will be enabled to discuss unemployment intelligently.

Every organization interested in making Philadelphia a better city, industrially and socially, has an opportunity and a duty to forward the collection and discussion of the facts of unem-

ployment in this city. The causes and facts of unemployment differ so widely in different industries, and even in different phases of the same industry, that any investigations taken up should be concentrated upon a study of a single industry. The Consumers' League has perhaps the best opportunity to throw light on conditions in certain Philadelphia industries by including a study of the amount, cause and results of unemployment in the industries which it investigates. The Wharton School of the University of Pennsylvania should take the lead, in the community's efforts to study the problem. A course in unemployment should be offered. Eventually a department of unemployment would be established which shall give graduate and undergraduate courses in the subject; whose graduate students shall be assigned to investigate facts and results; and which shall assist in forwarding and co-ordinating the efforts of the various agencies that are studying the situation in Philadelphia. The Pennsylvania Training School for Social Workers is another agency that we naturally expect to forward such discussion. Yet its roster of courses for the year 1914-15 contains no course on unemployment. Every school, every church, every club that is interested in social and industrial questions has a chance to encourage and push the discussion of a question so vital to the industrial and social well-being of the community.

#### PART IV—THE MANAGEMENT OF EMPLOYING CONCERNS IN ITS RELATION TO UNEMPLOYMENT

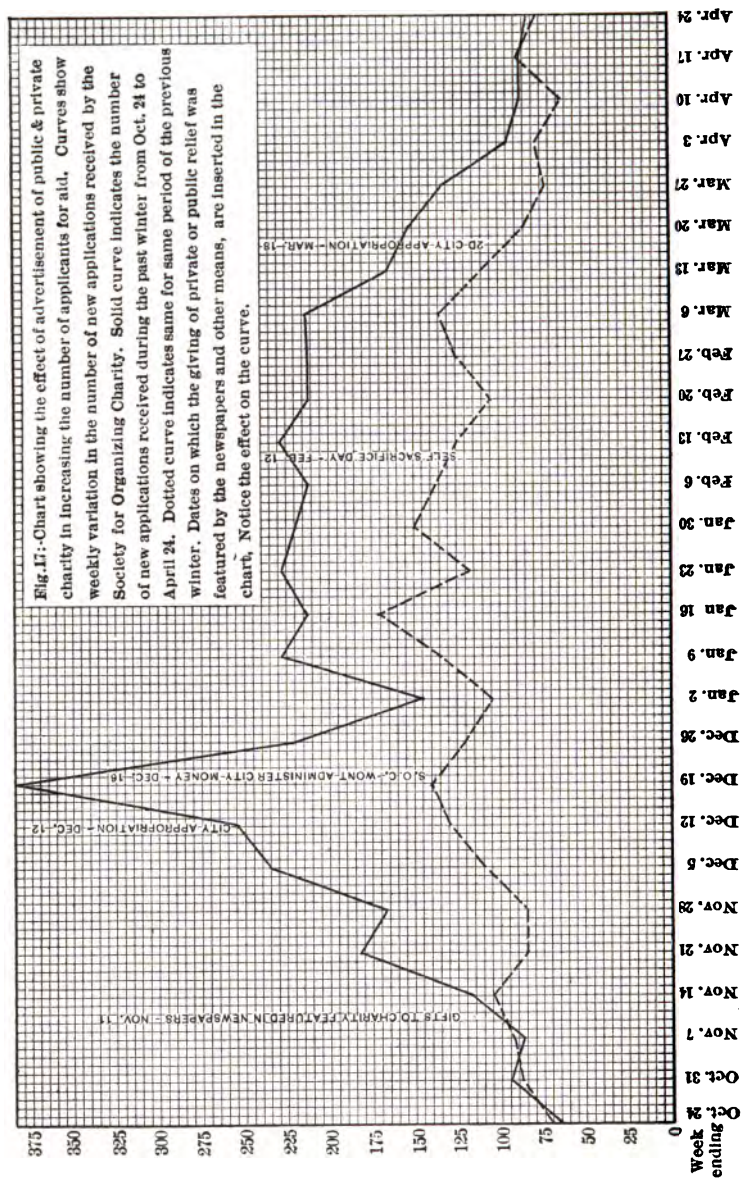
Philadelphia employers cannot afford to disregard the injury received from unemployment. No community can, without grave concern, witness the degeneration of its working classes through unemployment, nor can it be oblivious to the terrific injury to its industrial interests through unemployment. The obligation, therefore, rests upon the entire employing community to do everything that is humanly and financially possible to reduce this evil.

Philadelphia's methods of meeting her unemployment during the winter of 1914-15 cannot be regarded for a minute either as permanent or ideal. At best, charity is not a satisfactory solution of unemployment. Our charitable methods during the past winter were particularly unfortunate. In this connection, we should freely recognize the very remarkable administrative efficiency and the spirit of public service and actual accomplishment which characterized the Emergency Aid Committee. It may even be granted that, in lieu of better measures, such steps may possibly be necessary, in unusually severe times, in order to prevent suffering. At such times we "face a fact, not a theory." But we must not consider charity as a satisfactory way to meet unemployment. Such a program tends to pauperize a community, invite shiftlessness and discourage self-reliance. As Jeff Davis, king of the hoboes and manager of the Hotel De Gink in New York, puts it, "If you pay people to beg they will beg; if you pay 'em to work, they'll work." It furthermore tends to disgrace self-respecting workers and to injure their pride permanently. Emergency committees and public aid can be justified only in cases of severe extremity, under conditions analogous to those in a hospital, where a very dangerous and unusual operation is sometimes resorted to in order to save a dying patient's life. The necessity of resorting to charity to handle unemployment, instead of being a solution of the problem, is an admission

that we have not solved it. It is a mortifying evidence that we have not been sufficiently "on the job" to create an industrial society in which such catastrophes cannot occur. Unemployment catastrophes are the punishment for our neglect.

The effect that highly advertised charity has in destroying self-reliance and in teaching people to become voluntary paupers, is abundantly found in the city's experience during the winter of 1914-15. Shortly after the first appropriation of \$50,000 by Councils, large numbers of foreigners appeared before the branch offices of the Society for Organizing Charity in South Philadelphia and demanded "some of the city money" as their inalienable right. Of 94 new applications that came in to the southeast district immediately after the donation of public aid was featured in the newspapers, one of the heads of the Society for Organizing Charity selected at random nine cases that would be roughly typical. Investigation showed that all but one of these cases were not only undeserving, but not even seriously needy. This clogging of the machinery of organized charity with undeserving cases makes it difficult to reach and handle the really needy case at a time when help is most needed. Better evidence of the effect of the wide advertising is found in the sudden and large increase in the number of new applications received by the charitable societies immediately after the appropriation of city money, the formation of the Emergency Aid, Self-Sacrifice Week, etc., became public through the newspapers. The connection between the number applying for charitable aid and the excessive advertisement that is connected with the granting of public relief is seen in fig. 17, which shows the number of new applications received each week during this winter, in connection with the dates on which the granting of relief was featured in the newspapers. Meeting unemployment with charity tends to produce the type of individual similar to a Philadelphian whom we may call "Jack." Jack had been out of work four months. A friend expressed his sympathy and received the reply, "Oh, it's not bad, it's like any other trade after you learn it."

To what extent Philadelphia's advertised philanthropy during the past winter tended to bring into this city the floating



vagrants of other cities, it is impossible to say. It is reasonable to suppose that that result was brought about in Philadelphia during the winter of 1914-15.

Unemployment is primarily a question of industry and industrial organization. The manager of a shoe manufacturing company in Philadelphia asserts that unemployment cannot be reduced to any great extent under the present individualistic, competitive system of doing business. Waiving the question as to whether this fatalism is justified or not, it is obvious that the introduction of a new industrial system is a proposition so doctrinaire that it can scarcely be counted as offering any immediate practicable hope. It behooves us, therefore, to see what can be done under the present system. Since unemployment is an industrial question, the responsibility for ameliorating the evil must rest primarily upon the shoulders of those in control of modern industry, regardless of whether the unemployment be due to individual management of a business or to broader economic considerations. It is distinctly up to employers to attack the problem more seriously than they, as a whole, have heretofore; whether they do it from altruistic motives or because of the fact that, in the long run it is the wisest business policy. It is up to them, even if it involves as fundamental changes as a certain large manufacturer implies when he says, "To secure uniform daily production, and to partially eliminate the evils of seasonal production, require practically an entire reorganization of the business with this as one of the primary objects. It is not a part of the organizing methods; it is a primary objective and must permeate every fibre of the whole institution."

Philadelphia boasts that she is the "World's greatest Workshop." In few ways can her employers more certainly insure that this phrase shall remain true than by eliminating unemployment. Philadelphia, free from unemployment, would attain a degree of prosperity at present undreamed of. If injury to our community, through unemployment, continues to be disregarded we may endanger our crown.

What steps in dealing with unemployment are the more:

advanced, progressive and thoughtful employers taking which point the way for the majority to follow?

Before answering this question it must be recognized that the widespread unemployment that results from such unusually severe industrial depressions as we experienced during the past winter and as are more or less frequently caused by money panics, or "psychological" panics, or European War, or fluctuations in the tariff, is a thing which can seldom be offset by the efforts of the employer, without the risk of endangering his industrial existence. Although he has an obligation, so far as it is industrially safe for him, to furnish employment at such times, the causes of such conditions are not of his making; and such depressions are frequently so severe that he has all he can do to keep his industrial ship afloat. In other words, unemployment is, in some respects, a thing so broad in its origin that effective action to prevent its causes must be nation or world-wide.

To go back to the original question, "What can employers do?" Special study has been made of the textile industries; but many of the illustrations used are from other industries and the points mentioned are, to a greater or less degree, applicable to all industries.

At the outset it must be accepted as a fundamental principle that each employing concern should regard itself as one industrial family for the welfare of whose members the concern is responsible in the way in which the head of a private family is responsible for its members. This fundamental principle must underlie an employer's entire attitude towards his working force and guide all his efforts against unemployment. In the long run this will prove the only sound business policy.

With this family relationship, the 100 per cent. ideal, rarely possible of complete attainment, but towards which we should strive, is for each employer and each firm to accept responsibility for keeping a certain definite number of employees steadily employed—without overtime and with the minimum possible changes in personnel. This number should be the "rating" which each firm gives itself as the number it can keep steadily

employed. As one very progressive and successful employer writes:—

Many employers do not realize their duty to keep their working force intact under all conditions, with the exception of the very most unusual and aggravated cases of industrial depression. The keeping of the working force intact is not only a duty of the employer toward the employee and to the community, but it is on the face of it the only sound business policy. I believe not only that all public agencies should educate the employer toward the importance of this policy, but that they should also educate the employer to the fact that vocational and periodical depression must be looked for and should be provided against in prosperous times, at least to such an extent that a definite, sound and just policy is assured to the employee and to the community, if not more material help in some instances.

# 1. OBTAINING AND ANALYZING THE FACTS IN EACH INDIVIDUAL PLANT

The first need of each individual employer, just as with the community as a whole, is the need for more information. Enough has been said to show that a large percentage possesses nothing but vague information about their own conditions. In order to know just what the amount of unemployment is in his firm and just what are the various causes, each employer should collect daily records which would show, by departments and tasks, for each day, week, quarter or year, the following:—

1. Total number of employees in mill
2. Total number of absences
3. Causes of each absence
4. Actual payroll
5. Total payroll if all nominally on the payroll had been working full time
6. Actual number of hours made in plant
7. Total number of hours made, if all on payroll had been working full time (deduct national holidays)
8. Number of new employees
9. Employees laid off:—
  - a—Total number
  - b—Good reasons (marriage, death, promotion, etc.)
  - c—Where individual was responsible
  - d—Where firm was responsible
  - e—Where responsibility was uncertain



This information would enable a firm to compile for any given period information to show:—

1. The modulus of employment (i. e., the percentage of full time worked by employees). This would be ascertained by determining the rates between the actual total number of hours worked in the plant during the year and the number which would have been worked if all on the payroll had made full time (barring national holidays),—as follows:

$$\text{Modulus of employment} = \frac{\text{actual total hours worked per day, week, month, etc.}}{\text{total hours worked if on continuous full time operation during same period.}}$$

2. The causes of unemployment and the importance of each, thus indicating definite points for the firm to attack its own unemployment problem.

3. The labor turn-over (i. e., the relation between the number of unnecessary hirings and the average number employed).

On a basis of information collected by these records, a firm may determine just what its own labor turn-over is for any given period. Labor turn-over in its relation to unemployment is discussed on page 77.

The daily report used by one firm to collect information of this character is shown below:

**ABSENTEE, TARDY AND NEW EMPLOYEE REPORT FOR THURSDAY, MAY 20, 1915**

**Absentees Returned (7)**

Number.	Name.	Operation.	Reason.	Time.
148	Barbara Zajicek	Fips. and wits. stehd.	Sore throat and back-ache	x 1 da.
300	Maud Oashin	Foreman	Father was sick	x 1 da.
987	Helen Augustine	Sle. swd. in.	Per. funeral	x 1 da.
988	Mary Hoefler	Sle. swd. in.	Per. funeral	x 1 da.
990	Steve Dianlska	Shou. and slve. fin.	Per. naturalization papers	x 1 da.
1163	Mike Jost	Elevator man	Sick	x 2 da.

## One Day Absentees (5)

Number.	Name.	Operation.	Reason.	Time.
S. M. R.	Joe Cavath	Mach. inspector	Per. went to court	1 da.
737	Theresa Gedeon	Cts. trnd. bott. tek.		
748	Julia Broch	Cool. cor. tek.	Sick yesterday.	
751	Agnes Anek	M. H. col. tek.	Tel. sick.	
1382	Irene Steenstra	Lpl. and fronts exmd.	Sick yesterday.	

## More Than One Day Absentees (2)

41	Charlotte Marquardt	Route clerk	Tel. sick	x 2 da.
164	Adelia Flegger	Top. pkts. made		2 da.

## New Hands (5)

843	Minnie Matuska			
769	Alma Dffenback			
1050	Mary Bugar	Former		
2375	Mary Tarnovsky	Former		
2385	Stella Beth			

## Quitter (1)

1261	Mary Haluska	Butt. swd. on	Married.	
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## (Tardy (0)

By means of this record this firm was able to say at the end of the year:—

Actual full time working year..... 48 weeks

Actual amount of time employees could have worked in year..... 45.2 “

Actual amount of time employees actually did work in year..... 42 “

## 2. INCOMPLETE METHODS OF DETERMINING COSTS

It is not surprising that with such vague knowledge of unemployment as generally prevails, mistakes should be made as to whether it is better business to run or stand idle in certain bad times. As a matter of fact employers very generally underestimate the loss of an idle plant and over-estimate the loss incurred by running during slack times. An expensive haste in shutting down plants in bad times results. The theory held by cost accountants that all the expenses of operating and maintaining a factory must be included in the cost of the output produced serves to increase unemployment by inducing firms to shut down when good business policy demands that they should run at what

is apparently a loss. In slack times, when demand has fallen off, the entire expense of maintenance and operation is saddled on to the small output, an apparent high cost of production per unit results. Accordingly the firm hastens to shut down to avoid "running at a loss,"—and frequently does not even consider reducing prices,—as its selling department may wish—in order to stimulate demand.

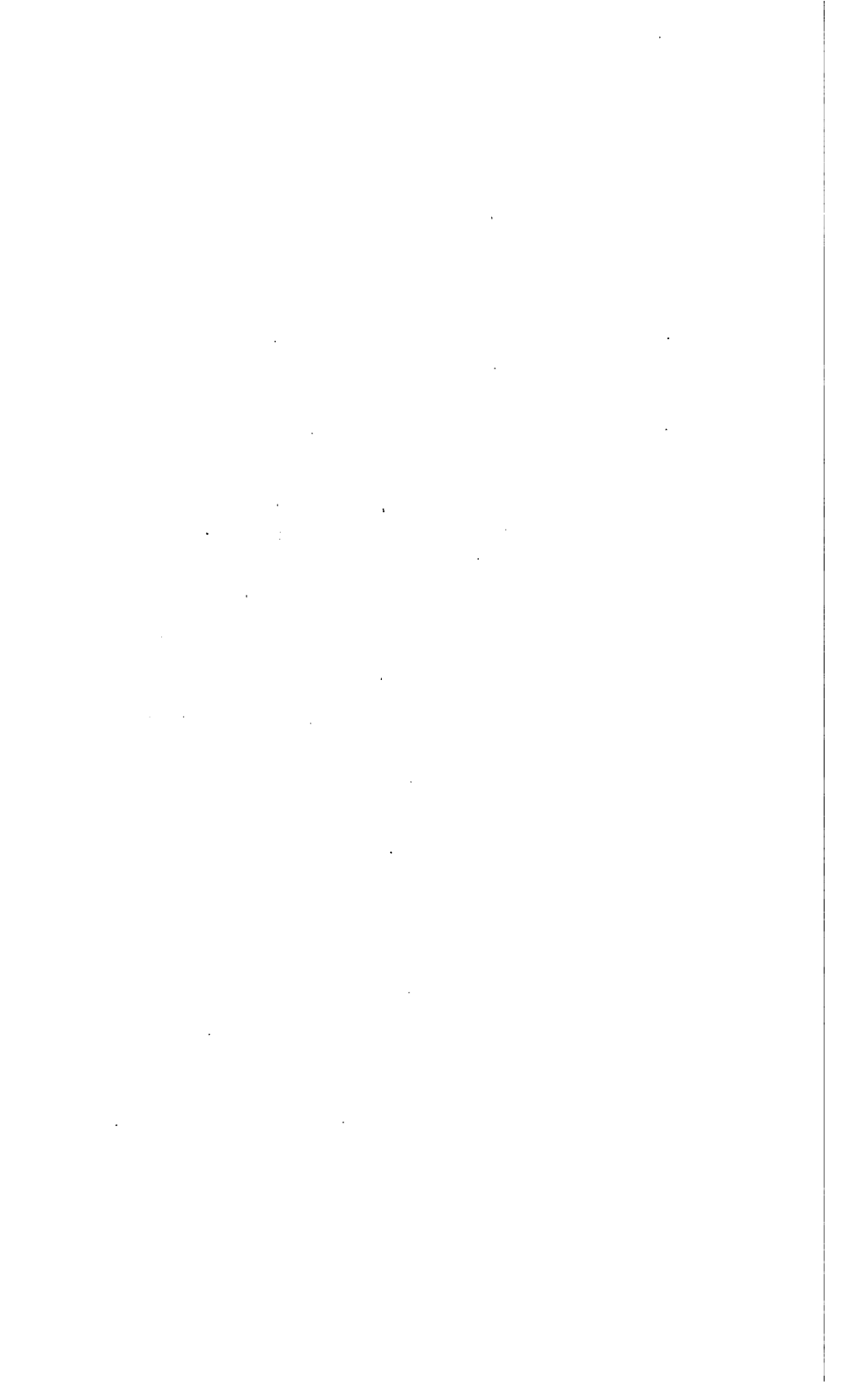
Newer cost accounting methods are pointing out the fallacy of this system, insisting that the expense of supporting a part of the plant in idleness is a business expense and should be charged to the business and not into cost of the product. Under this plan, while the plant as a whole might be losing money, a particular department might be making a good profit over its own cost of production. By thus separating the cost of idleness and the actual cost of production, it appears that it will frequently be better business to run when the plant as a whole is seemingly running at a loss rather than to shut down and carry those as well as greater losses in idleness. One authority on this subject asserts he will shortly be able to prove that it will pay an employer to run a department at what prevailing cost accounting systems would conclude to be a 25 per cent. loss.

### 3. MAINTAINING AN EXCESSIVE LABOR RESERVE

Many firms retain more people on their payroll than they can keep busy. The inevitable result is that some of the employees spend a good deal of their time on the streets or else, as is more often the case, the unemployment that results from this situation is "passed around" among the entire force and a great majority of the working force spend a very large percentage of their working time on "part-time." Taking this year in and year out, the accumulated amount of lost time or unemployment is tremendous.

This situation is illustrated in the lace industry. The prevalence of unemployment among the lace operators through good years and bad (see page 18) shows that there are more workers in the five lace firms in Philadelphia than the business can make use of. Fig. 18 shows the actual output in one firm for the lace





department for each month of the last three years, as compared with the approximate output possible if the lace weavers had been running full time.

Firms follow this practice of keeping an excessive number on their payrolls for a variety of reasons. The employer wishes to hold as large a labor reserve as he can so that, if a sudden order for rush delivery should come, he is in a position to put all hands on full time and turn the goods out in a hurry. Or there may be, for a short period of each year, a tendency to fall behind in deliveries; some employers keep enough help on part time, nearly all the year, just to supply their customers promptly at the period of maximum pressure.

A second reason for holding an excessive force is in order to discourage efforts on the part of employees to secure higher wages or other favors which the firm may not desire to grant. When there is a lot of slack time in a plant, employees are less apt to cause trouble by asking for favors. On the other hand, when orders are crowding the firm, the employees have the advantage of a better bargaining position, and consequently use the favorable opportunity to obtain what they want,—witness the numerous strikes at munitions plants in the United States during the spring and summer of 1915. In order to obtain the whip-hand in the situation, especially in highly unionized industries, employers endeavor to obtain an excess of men and machines so that part time may become the rule rather than the exception. One prominent Philadelphia hosiery manufacturer says, "Yes, I want to have enough help and machines so that my help will regularly get through the day at half past three or half past four or five o'clock. They don't ask for higher wages then as they do when they see orders piling up." This situation is apt to manifest itself by a firm having a number of plants in different localities, most of which do not ordinarily run at full capacity, or furnish full time employment. When a strike at any one plant occurs, it costs the company little or nothing to divert the orders to its other plants. Since it can continue the strike indefinitely with no extra cost, it is sure to win.

A third cause which leads to this situation is a decline in an industry or the failure of an industry to grow as fast as had been anticipated when the expansion of plant took place. In the over-expanded plant, the only advantage to be secured from the otherwise unproductive investment of capital is to keep force enough to man the entire plant—and distribute the work among them all. The excess labor reserve insures prompt deliveries and tends to discourage labor agitation. Under these conditions, labor unions frequently insist upon the firms distributing the work among all those in the trade. Labor unions thus help to hold workers in decaying trades; and the worker himself feels that by leaving his present trade he may sacrifice his skill, endanger his family and perhaps miss an unexpected boom in the present work.

In the fourth place, employers fail to train certain members of the working force to perform more than one single specialized task. This means that each department, each floor, each task must either carry or have available a sufficient number of workers to satisfy its maximum demand for employees. This practice is illustrated by the case of a large hosiery mill in Kensington. In the doorway of that plant ready to insert in the "Help Wanted" sign were the following list of occupations:—

Examiners  
 Boarders  
 Winders  
 Knitters  
 Girls  
 Boys  
 Pairers  
 Toppers  
 Loopers  
 Folders  
 Welters  
 Menders

In answer to a question whether workers were ever trained to do more than one task so that an excess of workers in one

department might do work in another department, the head of the firm answered "No." Perhaps this answer should not be taken literally, since in almost every hosiery concern employees are shifted from one task to another. However, it is true that there is too great a tendency to train workers for one and only one task in most manufacturing concerns.

In front of a large clothing house in Philadelphia there is a bulletin board on which the concern is constantly making known its wants for workmen and workwomen. It recently read:—

Ticket girls  
Sewers  
Girls  
Edge basters  
Feller hands  
Canvas basters  
Pressers

It is not known whether this firm trains a percentage of its employees to work interchangeably in different departments as occasion may require or not. However, this bulletin board list, taken in connection with the list that hung in the doorway of the hosiery firm, shows the specialized ability sought even in simple operations. It also serves to illustrate that unless an employee, who works at such a detailed task, is trained to do more than one thing, he or she must in a great many cases be subject to much irregular employment. If one department cannot call on employees in some other department to help it over a busy period, it must either carry normally an excess of workers, or frequently call in and lay off extra help as required. With each department thus carrying a separate margin, the labor reserve for the entire plant mounts high. No matter whether it is the practice of the firm to lay these extra men off as soon as the need for them ceases, or whether they are all retained and the work rotated among the force, unemployment to a large degree must result.

This reserve trouble is being, to a considerable extent, obviated by using as far as possible a common reserve for different



departments. In the lower grades of work, this is done simply by seeing to it that before such labor is laid off, there is no work in any other department. In the higher grades of help, however, the problem is more complex. Some few firms systematically train all or even a small portion of their help to do (well) two or three tasks other than chosen specialties. All departments then have a common reserve, which can be shifted as occasion demands. Or, if a wide seasonal change in the nature of the work takes place, the majority of the members of the working force simply change to a new occupation. This accomplishes, at least, an avoidance of an excessive labor reserve for that plant and continuity of employment for those on its payroll.

The superintendent of a large printing plant (outside of Philadelphia) who has followed out this idea in training women workers, described their methods in a letter as follows:—

Many of our girls know how to operate three different machines and are expert at one or more of the manual operations, such as pasting, gathering, hand-folding, gold-laying, etc. That they have this knowledge is due to the fact that scientific management has

*First:*

Demonstrated the advantage both to the firm and employees of training workers to do more than one kind of work.

*Second:*

Made it possible to select employees who can learn to do the different kinds of work efficiently.

*Third:*

Furnished facilities for training the people in the shortest time and with the least effort.

*Fourth:*

Furnished an incentive for the worker. This incentive may be either financial or the opportunity for advancement or both.

With these selected and trained workers, with a normal amount of work, our regular employees will have practically no lost time even during the slack season, and their pay should average from 20 per cent. to 30 per cent. more than under the old system. Workers properly taught soon become bonus earners. Having earned bonus on one kind of work they "get the habit" and when put to other work are not satisfied until they can earn bonus on the new job.

The training of workers to do several kinds of work efficiently, the central control of the work and good routing make it possible:

1. To do a certain amount of work with fewer employees
2. Reduce cost
3. Give workers a higher wage
4. Give workers more steady employment
5. What is perhaps most important of all, it stimulates and develops the workers

There can be no question but that without scientific management we could not have trained the workers to do the different kinds of work and they would not have had as regular employment.

A convenient mechanism which assists in this work is an expense charge symbol which we call "retainers." In case we have a high-priced employee and give him work of a somewhat lower grade than that which he is accustomed to perform, our cost-keeping system permits us to charge the excess up to "retainers," which latter is then spread as a general business expense over the whole product. We use the same accounting device for taking care of the superannuated employees who are no longer able to compete in the matter of output but the question of whose discharge cannot be considered.

In some cases the responsibility for not reducing the labor reserve does not rest with the employers. Labor unions not infrequently oppose the training of employees to do other tasks, under the impression that each trade, by defending itself from the entrance of outside workers, is bettering itself. While some immediate gain may accrue to the trade thus protecting itself, it is a practice that surely does not benefit labor as a whole; and it is doubtful whether, in the long run, it will benefit the trade involved, since conditions will frequently be reversed.

#### 4. REDUCTION OF THE LABOR TURN-OVER

By the term "labor turn-over" is ordinarily meant the proportion between the total number of persons hired during a year and the average number employed during the year. For example, if a firm requires 500 persons to run its business, and, during the course of the year, has passed through its doors 500 more without enlarging the force, that firm is said to have a labor turn-over of 100 per cent.

This method of determining labor turn-over is too crude

to be of much use. Figures of turn-over so gathered have little or no significance. One year the amount of necessary hiring might be very high due to sickness, deaths, marriages, strikes or some other cause over which the employer has little or no control. The following year, due to an absence of these causes, the apparent turn-over might be very low. The actual amount of unnecessary hiring and firing may nevertheless have remained constant. To make our labor turn-over figures significant, we must separate the necessary hirings from the unnecessary hirings. We must separate the necessary hirings which grow out of an enlargement of the plant or which are necessary to replace unavoidable withdrawals due to sickness, promotion, death, etc., from the unnecessary hirings, which are in large part the result of poor management in the choosing, assigning, directing, etc., of employees. It is this unnecessary hiring which indicates industrial turmoil and it is this that our labor turn-over figures should measure.

To determine such a refined labor turn-over there should be deducted from the total number hired during the year the number by which the force was permanently increased during the year. This increase should be determined by subtracting the average number on the payroll at the first four paydays at the beginning of the preceding year from the average number on the payroll at the first four paydays of this year. This might be a minus quantity. Moreover, there should be deducted from the total number of hirings the number of excusable or necessary withdrawals. The proportion which this bears to the total number on the payroll represents the refined labor turn-over. The total number on the payroll is found by securing the average number on the payroll at the various paydays.

For example, we may suppose that a firm, which had an average number on its payroll of the year of 500. During the year 500 persons may have been hired. The permanent force may have been increased by 50 and there may have been necessary withdrawals amounting to 25 during the course of the year. To provide for the permanent increase and replace those who withdrew for an entirely unavoidable cause, this firm, therefore,

was justified in hiring 75 persons. Deducting these necessary hirings from the total number of hirings, we may assume that the total amount of unnecessary hirings amounted to 425. In other words, the firm had a refined turn-over of 425/500, or 85 per cent.

Even this "refined" process represents but the crudest sort of method of determining labor turn-over. The investigation and study of labor turn-over is only just beginning.

The question that immediately comes up is: What is the connection between labor turn-over and unemployment? Surely, if "A" is discharged and "B" is hired to take his place, the number employed or unemployed is not altered. However, high labor turn-over does affect unemployment in the following fundamental ways:—

In the first place, as one manager puts it in a letter:—"The answer is obvious, however, to anybody who has been engaged in employment work, that all these moves break down the self-reliance of the workers and decentralize the problem to such an extent that it makes it difficult to study. I know, in particular, of one man who was found, through circumstances over which he had no control, to change his job eight times during one year. At the end of that time he was estimated to have declined 50 per cent. in efficiency from that cause alone." In other words, the rapid shift, or flow of labor from shop to shop, tends to increase unemployment by taking men from the more efficient classes,—in which workers are apt to be scarce,—and placing them in the ranks of the less skilled and unskilled groups which are usually already overcrowded.

In the second place, as long as there are frequent changes in personnel in many classes of labor, by just so much will there be less chance for the development of skill and a good personal relationship between employer and employee. Without these abstract assets the average employer feels less financial and personal incentive to "hold on" to employees by furnishing steady employment.

In the third place, a generally high labor turn-over creates an excessively high labor reserve in certain industries. With the

kaleidoscopic movement of labor in and out of factories the actual requirements of an industry can be but vaguely known. The man who is "out", does not know what the demand for help in his particular line of work is. He feels that, anyway, the kaleidoscope will soon displace some one from a job and give it to him. This reasoning that "I will soon get a chance" brings an excess of workers into many industries, and unemployment results. The best illustration of this is found in the dock situation (see page 40).

Finally, in the fourth place, employers are just beginning to realize the costs to them through high labor turn-over. If they fully appreciated the money loss that is sustained through excessive hiring and firing,—through high labor turn-over,—and if they realized that irregular employment was one of the important causes of high labor turn-over (see page 57), they would give more earnest attention to the problem in their plants.

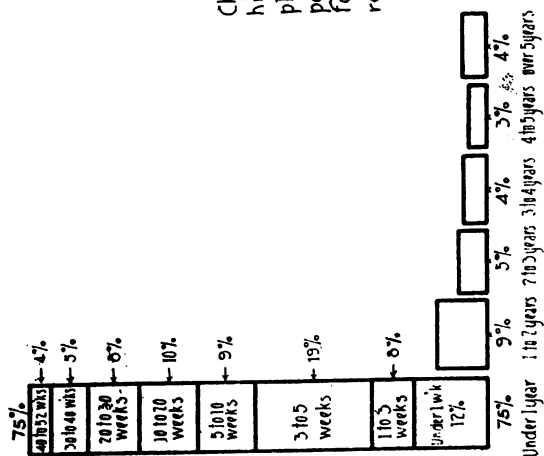
As one employer, who has made a careful study of labor turn-over, puts it, "The real point of the matter (so far as unemployment is concerned) is that if you have a trained worker, say at \$18 a week, and it becomes evident that work is going to be slack for ten days or a couple of weeks, it is cheaper to retain the man, with his experience and knowledge of the company's way of doing business, than it is to engage a new man, without experience, at the end of that period. This argument can be pushed too far, but at present hardly any attention is being given to it at all."

How great is the active labor turn-over among Philadelphia firms? Few firms make any attempt to keep records on this subject. In order to measure roughly the extent of this indifference, all of the firms on twelve squares of one of the leading streets in the textile district of Kensington were canvassed. Of eleven mills who were willing to discuss the point, all had no records of the size of the labor turn-over,—at best only a rough idea. To supplement further this conclusion, twenty-five confidential letters of inquiry were sent to representative textile firms. Of the seven answers received, only two possessed any records which showed the size of the labor turn-over.

In a textile firm employing labor of medium skill, a study was made of the labor turn-over, and the speed of the movement of labor through the shop in the Axminster Carpet Mill "A". The foreman had kept a list of the dates on which help entered and left his employ for the period of 1907-15. In this mill, as has been before pointed out, conditions were favorable for a low turn-over, because style was not such an important element in the goods, and slack seasons could be used to pile up large quantities of stock. By compiling the foreman's records it was found that 75 per cent. of the men and 66 per cent. of the women employees remained in the employ of the firm less than one year. They also showed that 48 per cent. of the men and 37 per cent. of the women employees remained in the employ less than ten weeks. Yet the foreman asserted that "most of the employees do not do good work until they have been with us eight weeks." During the process of compiling these statistics he evidenced considerable interest. On seeing the final results, his comment was, "Who'd a' thought it?" These results are shown graphically and in greater detail in fig. 19.

The above figures represent merely the speed with which labor flows in and out of the shop. Measured in terms of the annual number of hirings in excess of the permanent increases, the average of such hirings was found to be nine-tenths as great as the number of employees. This is shown graphically in fig. 20. A letter on page 159 of the appendix gives the views of a former Philadelphia foreman, on the labor turn-over and employment methods in the city's textile firms.

Many concrete illustrations of the size of the turn-over in many Philadelphia firms might be cited. In view of the absence of any comprehensive information for Philadelphia, a study made by Magnus Alexander, of the General Electric Company, throws general light on the size of the labor turn-over. The result is probably fairly typical of Philadelphia. Mr. Alexander made a study of the size of the labor turn-over among all classes of employees (except those belonging to the commercial and engineering organization and the general executive staff) in a large number of factories of all sizes in the United States and Europe.



**FIG. 19.**

Chart showing length of time male employees hired from 1907 to 1915 remained in the employ of one representative Axminster carpet firm in Philadelphia. The chart for female employees shows almost parallel results.

165  
Average number employed →

148  
Average number of annual hirings  
minus permanent increases

FIG.20.

Chart showing the relation between the average number hired per year in excess of those permanently added to the payroll in Axminster Carpet Mill "A" for the period 1907-1915, and the average number employed. Note that the number of annual hirings per year is about 90% as large as the number normally on the payroll.

This high labor turn-over has a direct and vital bearing on the employment problem; it can be greatly reduced by efficient management.



This study was made during the year 1912,—which may be considered a normal industrial year. The investigation showed that the labor turn-over (including necessary and unnecessary hirings) of these firms was over 100 per cent. On January 1, 1912, 38,668 persons were employed in all of these concerns. On December 31, 1912, 46,796 persons were employed. The increase in the working forces during the year, therefore, totalled 8,128. Yet, the records show that during the same period 44,365 people were engaged, indicating that 36,237 people had dropped out of the employment during the year. In other words, about  $5\frac{1}{2}$  times as many people had to be engaged during the year as constituted the permanent increase of force at the end of that period.

Making allowance for the increase to the force, and for removals by death, illness and other unavoidable cause, Mr. Alexander concludes that practically the engagement of 22,140 could readily be defended. What should be said, however, of the fact that 22,225 were engaged above the necessary requirement?

The wide scope of this study makes it reasonable to suppose that its results are, on the average, typical for the mechanical industries in Philadelphia as well as for any other industrial center.

Altogether aside from the degenerating effect of this state of affairs on the employee, it represents a big leak to employers. Different Philadelphia employers estimate the cost of unnecessarily discharging an average wage earner at from \$30 to \$100, but here also there is little real knowledge of cost. Mr. Alexander's figures may be taken as typical. Based on estimates by employers for different classes of labor, Mr. Alexander figures that the loss incurred by these firms in unnecessarily hiring 22,225 persons during the year 1912, as approximately \$775,000. How little this loss is appreciated among Philadelphia textile firms as a whole is shown in the statement above referring to the small percentage of firms who keep records.

Granted the situation and its cost to employer and employee, what can be done about it? It is a well established fact

that high labor turn-over can be very largely and profitably reduced by greater care and efficiency in management.

The experience of one Philadelphia concern, manufacturers of a standard product which is almost without seasons, is significant. This firm employs nearly 1,000 persons. In 1911, when it first began to consider seriously the problem of excessive hiring and discharging of help its turn-over (based on necessary and unnecessary hirings) was 100 per cent. The next three years witnessed a steady reduction in the turn-over, which, by 1914, was less than 20 per cent. Equally significant of the possibilities in the reduction of labor turn-over is the case of a textile firm well known for the consideration shown for the welfare of its employees. This firm has a turn-over so low that there is a common saying to the effect that if a ——— man is "on the streets" there's something wrong with the man.<sup>1</sup> The experience of a third firm, a cloth firm outside of Philadelphia, simply adds evidence that it is within the power of individual managers to reduce the labor turn-over. This firm, by a scientific study of the problem, and as a result of earnest efforts to secure employment, reduced its turn-over by 80 per cent. from June, 1910, to July, 1914.

What are the methods used by these firms or approved by the more progressive employing concerns by which this terrific cost can be reduced, after management once becomes aroused to the importance of the problem?

It is apparent that if any impression is to be made on the excessive labor turn-over, a great deal more attention and study must be given the "man" problem as contrasted with the "material and machine" problems.

The specific methods used by the above firms, and most widely approved by progressive concerns, to secure a lower labor turn-over, are three:—

- A. Better methods of hiring and firing.
- B. Better methods of training help.
- C. Reduction of fluctuations in employment.

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<sup>1</sup>Yet it is significant that when this firm, one of the best managed in Philadelphia, recently increased its force by 300, over 2,200 persons had to be hired to secure the 300.

### *A. Better Methods of Hiring and Discharging Help*

The greater attention to the "man" problem must manifest itself, above all things, in much more attention to and study of scientific methods of hiring and discharging men. The first requirement is that the handling of the employment problem should not be left to the foremen of different departments, but should be transferred to some high grade functionalized employment official or department, according to the size of the plant. As the manager of the cloth firm previously referred to says:—"For the employment function, every industrial organization should have some one person or department whose sole business is the study and handling of this problem. This is a function that cannot be administered by some head or underling in an operating department."

Unfortunately, the prevailing practice among the textile firms in Philadelphia is to leave the hiring and firing to the foremen of different departments. The canvass on "X" street (page 80) showed that, of eight firms who discussed the matter, six left the hiring entirely to the foremen of different departments. In two, the hiring was done by one functionalized officer for the entire plant. To supplement this canvass, a number of inquiries were directed to the managers of twenty-five firms scattered at random throughout different lines of the textile industry. Of eight answers, six indicated that the hiring and discharging of help was left to the entire charge of foremen.

The result of this lack of centralized employment is an almost complete lack of touch between the responsible heads and intelligence of the concern and the employment problem. A statement that is applicable to many concerns was made by one of the heads (in charge of records) of a hosiery concern. "We would never know here in the office when a person is being taken on or laid off if their names were not sent down every two weeks to receive pay." In many concerns no one but the foreman has any record even of the names of employees. In the office workers appear as number so-and-so, which, for all the firm knows, may and often does mean, some one this week and someone else next week.

This lax method of hiring and firing by foremen means that the choosing of help is left in charge of a man who is already overburdened with other duties, and who, though he may possess a certain amount of technical skill and aptness in the processes of a particular department, has not the background for the successful employing of men. As a result, it becomes a secondary matter; and misfit employees, who are apt to become discouraged and leave, result. An extreme case of the lack of care under the foreman system is told of a Philadelphia textile factory. This firm advertised for help on a certain day. On the day indicated a large crowd of the jobless had assembled. When the doors were thrown open a mad scramble ensued as each person tried to grab a machine. Whoever got a machine remained. No selection was made. Surely this struggle was not one guaranteed to eliminate the unfit—the inefficient,—or accurately fit men to jobs.

In another case, the foreman who was to choose new help threw a number of apples into the assembled crowd. Whoever caught the apples got the job.

The foreman is ordinarily incapable of judicious firing. Too often he uses his power to fire as a means of discipline, or as one large employer puts it,—“to keep the fear of God in their hearts.” Perhaps the ideal attitude toward the firing of help is suggested in the case of the large Philadelphia firm who orders a rigid investigation whenever a person voluntarily leaves their employ, to ascertain why anyone should ever want to leave. The head of one of the largest employing concerns in Philadelphia very deftly suggests the evils of leaving the employment function in the hands of low grade men such as foremen, when he says, “Any mutt can fire a man.”

Furthermore, the unsupervised authority of the foreman contributes to high labor turn-over in the every-day relationship with his employees. Not merely does he bring in misfit help,—who will soon leave,—and discharges needlessly, but also he unconsciously drives many away by his sheer arbitrariness. One of the largest employers in Philadelphia, who works under the “foreman” system, says, “I have time and again

seen my foreman do things that were absolutely cruel; and yet I am powerless to prevent it." A large lace manufacturer told the Philadelphia Secretary of the National Lace Weavers' Union, "I have more strikes and labor disputes as a result of the foolish and arbitrary acts of some foreman than any other cause." Closer supervision of the relationship between foreman and worker by a responsible executive should work toward the eradication of much needless withdrawals from the employ of the firm.

The result of the control of hiring and firing by foremen and the superiority of control by a functionalized employment department is evident from the testimony of the following employers. One employer says:—

I know of cases of foremen who frankly acknowledged to their intimates that they make a practice of discharging so many people once in so often to keep alive a healthy appreciation of the dependence of employees upon them. I know of other foremen who have opinions which practically amount to superstitions, so baseless are they, as to the significance of certain unimportant details in an employee's work or manner. I could go on with such statements almost indefinitely. The real gist of the whole proposition, however, is that the company which is not willing to take a definite stand on this proposition of centralized employment is bound to have a labor turn-over far in excess of what it needs to be, with a large consequent expense to itself therefrom, and thereby to contribute to the unemployment problem of the city or town in which it is situated. I have never been quite clear in my mind as to why it is that the average foreman or department head feels his authority to have been impaired when the employment function is taken away from him. Such is the case, however, and it makes a very difficult factor in the problem.

One of the heads of a forging and finishing shop in Philadelphia describes as follows the experience and efforts of their firm in dealing with their own employment problem:

a. *Better control of hiring men.*

It is common practice for the foreman of each department to be given full authority to hire their help.

As foremen generally are not of much higher type than the average workman, this practice is very unsatisfactory. Men are hired without thought as to their fitness for the work they are to

do, but simply because they happen to be on the spot when a man is wanted.

As the turn-over of help in a factory is such an expensive proposition, it seems advisable to have both the hiring and discharging of men supervised by some executive who can analyze the fitness and qualifications of an applicant.

When foremen need help in a department they can apply to this executive, and from his records he would be able to furnish help as needed and of a type that would be more likely to give satisfaction.

*b. Better control of discharging men.*

No foreman should be permitted to discharge men, as quite often discharges are made as much on account of personal prejudice as on account of inefficiency. Again, discharge for inefficiency is a sign of weakness in the organization, as, if a man possesses the ability to do the work when he is hired it means that the foreman has not fulfilled his duty if the man is a failure, except in extreme cases.

After paying good money to break a man in, it is the height of extravagance to replace him with a green man at an additional expense if it is possible to raise such a man to your standard.

If foremen are allowed to hire and discharge indiscriminately, it often happens that men are laid off in one department when they are badly needed in another, and that green men are hired where needed when such department could have had the pick of the ones laid off.

It stands to reason that a man who has been in the factory in any capacity long enough to know his way around and get acquainted to some degree with the product is a much better prospect for any other department than a green man taken off the street.

Discharges for inefficiency or indiscriminate laying off of help tends to increase the unemployment problem.

*c. Analyzed factory conditions.*

We have found that workmen drift from one place to another if not thoroughly satisfied and that the turn-over of labor in the average factory is out of all proportion to the payroll. This turn-over results in great expense to the manufacturer, as the breaking in of new help on any work requiring skill will cost at least \$50 to \$75 per head. The turn-over also results in a great increase in the floating idle population of a city.

One of the duties of a functionalized employment department will be to collect data which will throw light on each company's own employment problem. One employer says:—

To begin with, what is everybody's business is nobody's, in the employment game as well as anywhere else. Men are picked to run a department on the basis of technical skill or aptitude in the processes of that department, and the employment of people is purely a secondary matter with them. As a result of this, in the first place, records are entirely lacking by which a company can study its own employment problem and learn from experience. If a centralized employment department did nothing else than to compile and issue the statistics of employment, I believe that it would pay any company to maintain such a department. When it is considered, however, that in any industry work is uneven in different departments and that the individual being fired from one department might be a valuable find in some other department which has a requisition in for additional help, the bearing of the question becomes even plainer.

A detailed statement of the organization, duties and advantages of a functionalized employment department, by Mr. E. M. Hopkins, Employment Manager of the Curtis Publishing Company, is found on page 162 of the appendix.

### *B. Better Methods of Training Help*

A second method of reducing high labor turn-over is by the adoption of more effective methods of training help. One of the frequent causes of workers quitting is the fact that they can't "get on to the work." While this is often due to innate incapacity, it more often arises out of the lack of any effective system in the plant for the instruction of new men. The supervision of the training in many cases will become one of the functions of the employment department in a large concern.

In many of the textile firms of Philadelphia there is either no system of training at all, or else the training consists solely in the privilege, on the part of the new worker, of watching an older employee for two or three weeks. Of the twelve firms interviewed on "X" street, seven had no training system, but depended solely on securing skilled workers ready made off the streets. In four, new workers were "trained" by being allowed to work with old hands for two or three weeks. Some idea of the thoroughness of such a system in one mill at least may be gathered from the fact that old hands were paid at the rate of \$1

per month to "train" new hands. In one of the twelve firms, the foreman did the instructing. Under such a system, it is not surprising that employers should complain of a scarcity of skilled labor, even in the midst of one of the most severe periods of unemployment ever experienced in the textile industries.

Of the duty of the employer in this respect, one employer, in discussing methods of training, says:—

A new employee, at the best, is undeveloped for the position which he is called upon to fill in any organization, and, as he has been employed in order steadily and permanently to fill a position necessary for the objects of the organization, he needs and is entitled to especial attention in order that he can be developed to fill that position fittingly. Given character and fitness for the organization, the acquirement of skill in the performance of a given duty is generally a matter of proper training being provided by the administrative side of the organization. It must always be remembered that skilled and fit men are not born, but made, and it is an essential function of any industrial organization to train men and make them fit for specific position necessary to the objects of the organization. There is no broader admission on the part of a manager of his own inefficiency and his own lack of comprehension of his duties and problems than the oft heard complaint on his part of the lack of skilled men.

Every improvement in training methods will aid in improving the unemployment problem by transferring workers from that tremendously overcrowded class and placing them in the ranks of the higher skilled, in which there is at present frequently a scarcity.

### *C. Reducing the Fluctuations in Employment*

Obviously the third step in reducing labor turn-over will be the need for a more serious study of means by which all forms of fluctuation in employment may be reduced.

Recognizing that the rise in some form or other of functionalized employment departments is a growing thing, and a thing to be assisted; recognizing also that the problems that confront those in charge of employment work in different firms are so complex that every manager needs to profit all he can by the experience of every other engaged in similar work, a number of



employers, at the invitation of the Director of Public Works, met and formed the Philadelphia Association for the Discussion of Employment Problems. This is a purely voluntary association for purposes of study, involving, on the part of members, no joint support of each other in labor troubles or of any outside course of action. Its object is to pool experiences and discuss common principles governing employment so that the wastes experienced by both employer and employee resulting from improper selection, direction and discharge of labor may be eliminated. An outline statement of the purposes of and methods used by this association is on page 169 of the appendix.

5. BY A CLOSER CO-OPERATION BETWEEN THE MANUFACTURING  
AND SELLING ENDS OF A CONCERN AND THE  
STANDARDIZATION OF PRODUCT

It is frequently true that a lack of co-operation between the manufacturing and selling ends of a business breeds a working at cross-purposes, without the joint idea of assuring continuity of production and employment to the manufacturing end.

The textile industries in Philadelphia suffer particularly in this respect. Among textile centers the country over, Philadelphia is conspicuous by the extent to which small mills compose her textile business. A very large percentage of the heads of these mills have at some time in the past come up through the mills as weavers. By dint of energy and frugality these men have been enabled to secure a start and to permanently establish their business. Such a history does not imply a broad business experience. As a result, many manufacturers say, "We are not sellers, we are manufacturers. That's enough for one man." A lack of capital has also contributed to this attitude. As a result, many have confined themselves solely to the manufacturing end and given little attention to the selling end, which has been turned over bodily to sole selling agents usually in New York City.

Under the arrangements made, the selling agent was frequently given a free-handed authority. This gave him power to disregard continuity of production for the employer; and he

naturally bent his efforts to selling that which was easiest for himself. Moreover, frequently the manufacturer turned over to his agent the entire job of marketing his goods. The producer could sell through no other source. The seller on the other hand usually sold for a number of others who made the same or a very similar grade of goods. The seller came to represent the entire market to the manufacturer, while the manufacturer represented only a small part of the business to the seller. Out of the better bargaining-position of the selling agent, he obtained an amount of authority that manifested itself in a number of abuses seriously contributing to irregular employment. In discussing these abuses especial reference is made to the hosiery industry (one of the largest branches of the textile industry in Philadelphia.)

**Abuses:** a. In the first place, the agent has nothing to force him to make serious effort to "back up" the employer. The selling end has expected the manufacturing end to be resourceful enough to cope with great irregularities in orders in good times and bad. When the whisper of hard times was first heard, the tendency was for the agent, who had small organization and little overhead, to "lay down" in his efforts just at the time when the good of the producing concern demanded that the greatest pressure be placed on the selling end. The manufacturer, not in touch with his market, was not able to go out and strive for more orders, even had he been willing and able to do so and had his contract with his agent permitted it. His only alternative was lower prices. On the other hand, one Philadelphia hosiery manufacturer who sells direct, spent \$1,000 extra this past winter in pushing his sales so that his organization might be held together over the present winter.

The jobber further reduces the demand for goods at critical times by a considerable reduction of the stock of goods carried as a reserve to supply the trade. Many large hosiery manufacturers in Philadelphia have given the sellers' lack of sufficient effort to secure regularity of orders, in good times and bad, as the chief reason for the firms cutting out the agent and doing their own marketing.

b. In the second place, it is an easy matter, since the goods

are not sold under a manufacturer's brand, for the selling agent to divert the orders that have been going to Manufacturer "A" to Manufacturer "B". Although the same number of orders may be coming through to the manufacturing trade as before, still, a long period of unemployment must result before readjustment will be made. On the other hand, where the hosiery is sold under the manufacturer's brand, the orders can not be diverted, at will, to anyone. They belong to a particular manufacturer. That manufacturer has stabilized his market and secured a grip on the only steady element on merchandizing,—the consumer's demand. Every phase of his activity, including the employment of labor is, therefore, subject to less uncertainty and fluctuation. By possessing a market for a standardized product, a manufacturer can more readily make to stock and thus run his mill steadily, even though orders are irregular.

An example showing the degree of dominance that the selling agent aims for under the "sole selling agent" system is the case of a Philadelphia firm. When this firm began to sell direct, the former agent felt so outraged that it publicly announced it would drive this firm out of business in two years.

c. A third abuse is the evil of cancellation. As one textile man said, "The textile business is the most weak-kneed of any I know. In it, a contract is not a contract." Even though an order may be filed with a manufacturer, the goods bought, and even in many cases made up and shipped, in practice the buyer still has the right to "call off" the order. In some years, in certain lines, the percentage of cancellation runs over 50 per cent. A person closely in touch with the hosiery business "very roughly estimates" the average percentage of cancellations as eight. One Philadelphia concern had to close down when it received recall orders from its agent to 85 per cent. of a season's orders.

The significance of cancellation, in its relation to unemployment, does not lie in the percentage of orders discontinued, but in the fact that the practice tends to disorganize production and keep employers afraid to "make up" orders until delivery time is near and every possible opportunity has been given for cancellation. This creates busy periods just before a season's de-

livery and slack periods at other times. The hosiery manufacturer who sells direct can and does to a very much larger degree prevent this practice.

d. In the fourth place, the manufacturer who "farms out" his selling does not have his ear to the ground. He is slow to readjust himself to changes in demand,—a constant complaint from the selling agent. In a business characterized by frequent veerings in demand, as in the textile business, close touch with the market is particularly vital. As the great expansion of our own manufacturing industries plus the introduction of foreign goods takes place, markets will be better supplied than formerly; the consumer will be given a greater choice in his purchases; and he will be less inclined to buy whatever may be set before him whether it suits him or not. Because the consumer has become king it is essential that industry be so organized as to be in the closest possible touch with the changes in his demand. For example, the hosiery market in the last five years has come to demand less and less heavy cotton goods and more and more thin, imitation silk and silk goods. The manufacturers who are in touch with the market have been quicker to readjust themselves to this change than have those who sell through agents. Unemployment results from any such miscalculation of the market.

A final instance of the way in which a Philadelphia manufacturer failed to make the selling end of his business properly articulate with the manufacturing end, may be mentioned in the case of a cloth manufacturer whose agent is primarily the agent of another concern making a totally different kind of goods. The seller "goes on the road" at the time of year suited to the needs of the larger client. This happens to be the wrong time of year for the Philadelphia cloth manufacturer; so his sales are not large.

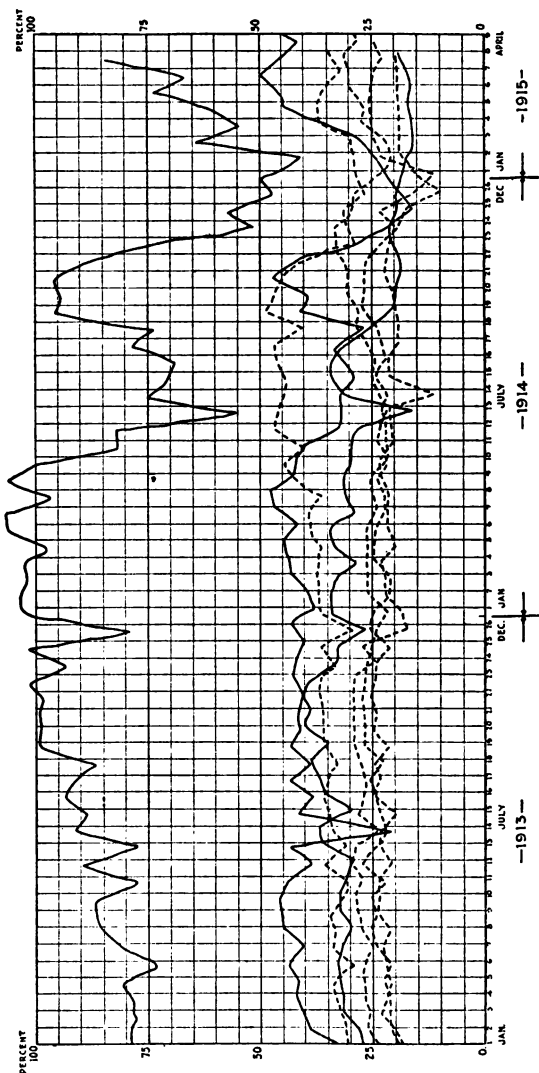
It is a significant fact that among the most successful hosiery manufacturers are a number of men who were formerly salesmen in large distributing houses. They know almost nothing about the manufacturing end; they do know how to sell.

In order to show the contrast, in production and employ-

**FIG. 21.**

Chart showing the variation in total payroll in seven large hosiery mills at each two-weekly pay day from Jan. 1913 to May 1915. Figures at side of chart represent the amount of money paid out each week. After the chart was constructed percentage figures were substituted to avoid confusing business of individual firms with the industry's production and employment. The product is, as a whole, similar, except that the firms who sell direct usually carry a larger variety

SOLID LINES = payrolls of firms who sell through sole selling agents  
 DOTTED LINES = payrolls of firms who sell direct to the retail trade under their own brand



ment, between hosiery manufacturers who sell direct under their own brand and those who sell through agents under jobbers' brands, figures were collected from eight of the leading hosiery firms in Philadelphia. These figures give each firm's total payroll at each two-weekly paydays during 1913, 1914 and to May, 1915. The kind of hosiery manufactured by each firm is stated in the foot note. The payroll curves showing a greater irregularity in firms who sell through selling agents are given in figure 21.

What one firm has been able to accomplish, in a seasonal business, through study and control of its selling end is suggested in a letter as follows:

What we have accomplished in the direction of leveling the curve of seasonable work has been done chiefly through the selling end.

Our business in jewelers' boxes used to be extremely difficult because practically all of the output was made to order and work could seldom be started until May or June, and had to be completed well before Christmas. Our factory, therefore, used to be out of work from the middle of December up to the middle of May, and so seriously overcrowded from that time on that poor service was frequently given customers and our business considerably damaged. A few years ago we began to make earnest efforts to get box orders in earlier. After the first year or so of readjusting, we found our customers were more than willing to help in this work, so that to-day the majority of our orders reach us between the first of January and the first of June. This requires facilities for holding the goods until the date desired by the customer for shipping, and, of course, ties up capital, but we are able to keep experienced workers busy the year through, are able to give almost perfect satisfaction in service to our customers, and through the consequent savings and increased business the cost of carrying the goods has been covered several times over.

One striking effect which went way beyond our expectations was the improvement in quality of our output, which under the old system suffered more than we realized through the work of untrained hands and the crowding and strain of the fall season.

Our line of Christmas specialties has been handled in the same manner, though an easier problem, because none of these goods are made to order. Designs for Christmas, 1915, were chosen in July, 1914, then approved and laid out as to the way they should be put up, etc., so that the sample run could be ready

by March, 1915. The goods are then sold for fall delivery and the stock manufactured during the first six months of the year.

We have found it possible once or twice to add to our line an item or two that could be made to fill in a gap in regular employment; for example, we introduced Christmas cards printed with steel die in order to keep our die-printing crew at work during a slack three months.

Again, we have made good progress by substituting stock items for specials. For example, certain goods of a standard type, ordered periodically by our sales end, were manufactured special as the calls came in—sometimes in dull times, but more often during a rush period, by selecting certain lines and manufacturing a sufficient stock during the dull months the situation has been greatly relieved.

The containers which are used for our merchandise were formerly made by us at different intervals, but under the new plan the entire quantity is manufactured during the first three months of the year. Many other moves of this sort tend toward further relief.

Our problems are undoubtedly easier than those of some other industries; however, we feel from our experience that if the advantages of regularizing employment become appreciated by the employer, some possible steps will suggest themselves, and these will in turn suggest further steps, so that considerable improvement, if not a big cure, can be effected.

The following is a statement of a Philadelphia forging and finishing firm. This firm has so co-ordinated its selling and manufacturing departments that greater regularity in employment is secured.

**a. Continuity of Employment.** By an analysis of factory conditions we have found it possible to minimize the loss of time on the part of our men due to changing machines from one pattern to another by making orders to the factory of the maximum size and by endeavoring to make changes from one size to another in a distinctive pattern rather than a blind change from one pattern to another. By this method we have increased the efficiency of our plant to a marked degree in so far as production is concerned and have cut down materially the average "turn-over" of our labor.

**b. Complete Analysis of Sales Covering Patterns and Sizes by Months.** By the installation of this system we find that some goods are so seasonable that the demand can be anticipated and goods made up in dull months in readiness for the market.

The anticipation does away with non-employment to some degree, and keeps the manufacturer from being overwhelmed with certain items at what is probably a very busy time on other lines. In other words, it levels the peak load and raises the curve of dullness.

**c. Dull Business.** In times of depression that are so pronounced that none escape entirely, it is necessary to push the selling force with more than usual energy. It is our aim to get out new designs or patterns to create interest and to stimulate business with selling helps for the merchant, pointing out to the retailer that in time of depression it is necessary to approach the retailer problem from a different angle, and that by the use of such helps he can increase his trade. We further try to market new lines of goods in order to keep our working force employed.

A shoe manufacturing concern (outside of Philadelphia) codifies the results of its ten years' experience in attempting to reduce seasonable unemployment (8 to 16 weeks) as follows:—

#### **Unemployment**

**a. Resulting from:** Seasonable demand for product where employees are laid off and work on short time for a considerable period.

**NOTE.** In the majority of shoe factories, particularly in the large shoe centers, this causes shoe workers to be unemployed for periods ranging from eight to sixteen weeks per annum; in some cases more than this. Many of the employees are laid off entirely but more often are obliged to work on very short time and at greatly reduced wages.

#### **How Improved:**

**a.** By education of distributors to a realization that in the long run this lost time has to be paid for in the product and by getting their co-operation with this company by working on monthly estimates, put in at the beginning of the season. In busy periods customers who order above their previous estimates are cut down on deliveries in favor of customers whose estimates are not overrun. Customers are not held strictly to monthly estimates, but failure to follow them is regarded as a sales problem and is freely discussed.

**b.** By the manufacture of special goods, made up without orders and sold through a special department created for that purpose. This department sells goods only when allotted to it, and sells them through special distributing channels, giving special values and special terms.



c. By distributing through both wholesale and large retail trade whose deliveries come at different periods.

One automobile concern pushes to the limit the business of co-ordinating the selling end with the manufacturing end by addressing its sales force in substance as follows: "We can make so many cars of each different grade this year. Now go out and sell that many."

From the foregoing illustrations, the importance of a standardized product is evident, as well as the part which a correlated sales department can consciously play in making possible a market for this product. In lines such as clothing, standardization of even a part of the product is a herculean task. In other lines standardization is relatively easy and can, therefore, be made to assist very materially in the steadying of production. The experience of one firm is a remarkable instance of how a little planning can result in standardizing production. This firm manufactures articles of printed matter used by everybody (e. g., envelopes). They describe their work as follows:

We have started here with month work along this very line, which we are calling "Standardized Orders" selling 10,000 to 20,000 articles of the same grade and style of printing, the same kind of paper, size, etc., running one order per month of these small orders totaling 1,000,000, etc., guaranteeing delivery of same at the end of the month. This gives us a large monthly stock order made up of a number of units, each unit calling for different electrotype and shipping instructions only.

In this way our prices can be made more attractive, the mass of detail connected with Planning Department is largely reduced and it gives us an even distribution of work, largely reducing the old rush orders, rush periods, overtime or night work, etc., and keeps our force more steadily employed. The profits from a Standardizing Order are very attractive, although the selling price is considerably less.

Not merely is this a good thing for the manufacturer and the employee, but also it is an even better thing for the buyer not to be running out of such a necessary commodity all the time.

## 6. TIME LOST WAITING FOR DYE (OR OTHER MATERIALS)

Most of the dyeing of textile fabrics in Philadelphia is done by separate firms, apart from the ones in which the dyed goods are made up into fabrics. Only a few firms maintain their own dye-plants. As a result it frequently happens in many firms that, when a fabric of complex pattern is to be woven, it will be found that a certain shade of goods has been forgotten. Or, before the garment is completely woven, yarn of a certain shade will run short. While more yarn is sent for, the loom stands idle. In some mills it is a rarity for weavers to make a full week, on account of having to wait for "dye." At times this wait extends to one or two weeks. The secretary of the Brussels Carpet Weavers' Association estimates that in some mills the loss of time runs as high as sixteen per cent.

That this lost time can be prevented is shown by many firms in parallel lines of the textile business, which may or may not operate their own dye houses, where the time lost waiting for dye is practically nil.

The problem of time lost waiting for dye is simply a part of the larger time of the daily and hourly interruptions in the plant, waiting for this or that reason. Though apparently small, this loss, in the long run, totals large. A shoe firm measured this lost time and succeeded in eliminating it to a large degree. See the following outline:—

### LOST TIME OF EMPLOYEES THROUGH DAILY AND HOURLY INTERRUPTIONS

#### Resulting from:

- a. Employees coming late; lost time inconsiderable.

#### *How Improved:*

1. By "In Late Pass System," a proper investigation by foreman, and discipline where needed.
- b. Employees going out or being laid off early, due to lack of work or stock. (Estimate lost time two to five weeks.)

#### *How Improved:*

1. By organizing material purchasing and supply system, based on pre-determined sheet system, which gives purchasing

departments ample time to purchase all material to exactly meet daily requirements, and to know absolutely when goods must be delivered in the various departments to meet the product in which this material will be needed.

2. By adopting a pre-determined standard daily production and by holding rigidly to it, foremen are enabled to compute accurately the number of employees needed on each job.
3. Pre-determination of employees needed on each operation is facilitated by the fact that all work is piece work, based on standard average production of operation.
- c. Lost time due to fluctuation on special operations or in special departments, due to variation in the class of product. (Estimate lost time one-half week.) (Note:—Estimate ten per cent. of employees lost five hours a week, fifty weeks a year, equal one-half week.)

*How Improved:*

1. By system of routing work into factories, not only uniformly in pairs each day, but also uniformly in pairs per day in certain types of product, such as patent leather shoes, bluchers, tan calf, button boots, etc. Where production on these items vary whole operations or departments may work under badly fluctuating loads. By routing such types of work into the factory at a uniform rate per day for pre-determined periods these operations are given a steady production, as well as the operations through which the total production passes.

There are many other ways similar to the above by which unemployment problems on special operations or departments can be wholly or partially solved. By keeping constantly in mind the necessity for steady employment it is usually possible to bring about good, or reasonably good conditions.

To secure vacations for employees the entire business is shut down for the Fourth of July week, giving employees an opportunity to get rested just before the hot weather.

"June and November are our most difficult months. We formerly closed four days in June and four days in November for stock taking. This was discontinued several years ago. Except for this inventory period there have been only one or two seasons in ten years when factories have been closed, and then only for one to four day periods.

Stopping this kind of unemployment is the business and duty of management.

#### 7. LACK OF BALANCE BETWEEN DEPARTMENTS

It is true, in many cases, that one department in a continuous industry will be too large, so that it is capable of producing for the department it feeds faster than this latter can consume. As a result the department that is too large must lay off and wait for the other to catch up. This results either from an honestly unsuccessful effort to balance the different departments, or from an effort to insure that the departments with low-priced help and machinery shall be so large that they will never fail to keep the more costly departments busy.

In Axminster Mill "A", the study showed that the "winding" and "picking" departments, which "feed" or are fed by the "weaving" and "setting" departments, each lost 31 per cent. of their working time during the four year period from April, 1911, to April, 1915. Yet the weaving department lost only 23 per cent. and the setting department lost only 19 per cent. of the working time. These figures indicate that unemployment is being created in the winding and picking departments because they are too large for the others.

#### 8. STOCK TAKING

A large percentage of the textile firms lose from one to three weeks' time a year in taking stock. Many of the payroll curves of individual concerns in the textile industry indicate that shut downs for one or two weeks a year are quite common in the textile industry. In fact, many firms lost from one to three weeks a year taking stock. Side by side with these firms, in similar lines of the same industry, are those which avoid, by a variety of devices, the loss of any time at all through the taking of stock.

It should be remembered that many concerns' lost time that is credited to stock taking is really due to lack of orders.

#### 9. LIMITATION OF THE AMOUNT AN EMPLOYEE IS ALLOWED TO EARN EACH WEEK

In many mills an employee is not permitted to earn more than so much a week. Either he must go home after earning

that amount or else he must dawdle around the plant, pretending to work. In some cases, this rule is put in force by the employer with the hope that, by thus distributing the work over a larger number, a larger labor reserve is kept available for his particular plant. In other cases, it is a rule promulgated by labor unions who either want what work there is distributed over all in the trade, or who fear that if ability to produce a larger output is shown, the piece rate will be cut down. The result in either case is the same.

One of the largest employing concerns in Philadelphia places a limit on the amount that employees in certain departments may earn. Investigation showed that in a two-weekly payroll sheet of a large hosiery firm in Philadelphia, 31 of 69 piece workers in the pressing department earned within five cents of \$36. Since these employees were not allowed to go home early, a good many trips to the water cooler must have been involved.

#### 10. FREQUENT CHANGES IN STANDARD DAILY PRODUCTION POLICY OF FACTORIES ACCORDING TO VOLUME OF ORDERS IN SIGHT

One Philadelphia concern employing many thousands of men, regulates the laying off of help by the total volume of business booked so many weeks ahead. Running a plant by such an arithmetical rule means that production will be as irregular as orders, and necessarily implies great irregularity in employment. Within a six weeks' period in 1908, this firm laid off 60 per cent. of its help.

The methods of the shoe firm, mentioned above, in eliminating the two to four weeks of annual unemployment are described by this firm:—

Frequent changes in standard daily production policy of factories, according to volume of orders in sight.

Note:—Many factories have no standard daily production basis, but change frequently, taking on or laying off help as needed. Roughly estimated, this causes unemployment of from two to four weeks per annum, in many cases much more.

#### *How Improved:*

1. By adopting and holding absolutely to a uniform standard daily production basis for each factory. Many of our factories

have run for a period of several years, putting into the factory each day a production varying not over one per cent.

2. When orders do not in a monthly period or block equal the factory capacity, by filling in with special stock goods in small quantities, to be distributed through the special department previously mentioned.
3. When goods needed to fill monthly delivery blocks are necessary, by asking distributors to send in orders on staples to fill shortages.

#### 11. MANUFACTURE TO STOCK

One of the most common methods,—so obvious as hardly to need mentioning,—adopted to assure steadiness of employment, is the practice of using the dull seasons to manufacture to stock, where the product is of a nature that does not lose value through being stored. When the main product cannot be stored, firms frequently use the slack period to make up a special product.

#### 12. MISCELLANEOUS PRACTICES BY EMPLOYERS WHICH LESSEN OR INCREASE THE BURDEN OF UNEMPLOYMENT

**a. Giving Notice of Lay-off.** Where the periods at which help is laid off are fairly regular, and can, therefore, be predicted in advance, it is not too much to ask employers to give notice beforehand of the date on which such lay-off shall take place. This plan is perhaps best adapted to department stores, where it is known long in advance that a certain percentage of hands will be laid off at certain periods. In most department stores, however, this practice is not followed; and extra help is hired under the agreement that it may be laid off without notice.

**b. Dovetailing of Trades.** Where there is a regular seasonal laying-off and taking on of help, there are possibilities of regular seasonal transfers between firms whose busy seasons and slack seasons dovetail. This "dovetailing of trades" is almost unknown.

A printing firm (outside of Philadelphia) with a maximum demand for help in the summer months, writes, as follows, of a plan it has in mind for the regular exchange of help between itself and a neighboring department store:—

What we had in view was to have an evening school of instruction so that a selected group of girls from our firm could be trained for the work required from sales girls in a department store.

There is a civic association in this town where they have evening classes. I believe they teach domestic science, millinery, sewing, etc., and I see no reason why it would not be perfectly practical for arrangements to be made so that a competent person from a department store could teach a class how to make out the sales slip, to meet customers and the best methods of doing the required work.

I hope some time that this will be tried out. Undoubtedly it would be much easier to bring this about if two plants were near to the homes of the workers. We are fourteen miles from the department store, and most of the women employees live in this town and they do not like the work in the department store on account of both the carfares and the time required to make the trip.

This practice would tend toward continuity of employment to employees and would insure the retention of trained help by each concern. A few firms, when it is necessary to lay off help, assume responsibility for securing new positions for them. This represents an ideal attitude on the part of such business firms. A general adoption of this practice would do much to assist in the dovetailing of trades with its resulting advantages to both employers and employees.

**c. Loans to Employees.** A Philadelphia firm that manufactures shirtwaists has, for ten years, loaned money without interest or collateral to its employees. Assurance is asked that the money is not to be spent viciously; other than that, the company does not meddle in the employees' use of the loans. It is a significant commentary that this firm has never lost a dollar during the entire ten years, through failure of employees to return what was borrowed,—and the firm employs several hundred workers.

**d. Retaining all of the Employees' Time at Fractional Productivity.** It is the practice in some textile mills for a man to operate two or more looms. In dull times the employee is allowed to run one loom only. Thus, although the employee is working only at half or at third capacity and wages, he is forced

to spend all of his time in the mill. If the weaver were allowed to run all of his looms when in the factory, he would make just as much, and at least have a holiday out of his unemployment in which he could rest, pick up an odd job here and there, or seek steadier work. The firm undoubtedly follows this practice so as to "hold" on to its employees. It is a practice, however, which even the "benevolent" argument,—“by this means we keep them out of saloons,”—cannot justify.

**e. Enforcing Needless Expense on Employees During Periods of Unemployment.** One of the largest of the employing concerns in and around Philadelphia has a factory located over ten miles from the homes of most of its workers. Although for a year the firm has been running to a very small percentage of its capacity, it has required all employees to report at least once a week to the office of the plant ten miles away regardless of whether there was any work to be done or not. Employees who did not so report were laid off the list of those nominally on the payroll. This rule required a weekly carfare expenditure of ten or fifteen cents each way. Thirty, or even twenty cents a week is a very severe drain on the resources of a man who has been working little or none for over a year. The company had offices near the homes of its workers where reporting could easily have been done, if necessary. The carfare expense might thus have been avoided. Imposing such a needless burden is evidence of a criminal lack of responsibility on the part of that individual firm.

**f. Part Time Employment.** Permanent part time employment has already been condemned (p. 72). As an emergency measure to distribute employment in conditions of unusual stress, it can often be of great service. The head of a Philadelphia concern employing several thousand men writes as follows:—

Employers can do much to reduce the amount of unemployment. Managers of active manufacturing business can and should make employment much more steady than has too frequently been the case, and can use perfectly legitimate means to reduce to a minimum fluctuations in the number of employees due to



times of industrial depression. Employers owe a duty to their employees, to their stockholders and to society to keep their working forces intact, active and well content, and the strongest possible measures should be used to this end.

One of the most important means to this end was freely practiced during a period of depression and hardship which occurred during the winter just closing, in that it was found possible to take the amount of work available in a very depressed period and spread it and the wages consequent upon this work over as many *families* as possible, thus distributing the money available for wages, even though in smaller quantities per unit, over a larger number of individuals, and keep them from absolute unemployment to a greater degree than would have occurred had the same amount of wages been spread over a smaller number of employees working practically full time.

It is fully recognized that this is not good manufacturing efficiency, but it was deemed a humanitarian measure to be executed in times which were very hard for both employer and employed. It is certain that the employees who experienced this form of co-operation appreciated what was being done, and all seemed willing to assist to the fullest degree. Naturally, there was no discussion of these measures—they were simply tried and found to be useful and successful.

Apropos of the same point, another employer writes:—

At times of industrial depression the working force should not be cut down except only under such extraordinary conditions as may be forced upon the industry, which are absolutely beyond its control. When there is not enough work to keep the entire working force steadily employed, the number of hours of employment should be reduced equally throughout the whole organization. If all managers realized their duty in this respect, both to their organization and to the community, there would be very little, if any, aggravation of the problem of unemployment during periods of industrial depression.

Where part time is necessary, many employers can, without difficulty, so arrange the working time that the burden of unemployment can be considerably lessened. For example, if the worker is allowed to work full time for several days, then take several days completely off, he is in a better position to make some use of his idle time than if he worked every day at fractional time.

**g. Times of payment.** One concern interprets the rule that firms pay their help every two weeks as meaning "every two weeks of completed service." In other words, this concern pays only after an employee has worked for twelve days even though that twelve days may be distributed over a six, eight or twelve weeks' period, as it is during slack periods. As a matter of fact, this firm is decidedly irregular, so that this is frequently the case. Earnest and dignified protests from conservative business associates have been repeatedly ignored.

## PART V—THE DUTY OF THE CITY GOVERNMENT

Since the city cannot afford to permit its citizens to live subnormal lives, it is the business of the government to leave no stone unturned in dealing with unemployment. It has already been pointed out that the appropriations of public money for relief purposes can be justified only in extreme distress.

### MUNICIPAL WORK

The feeling that the city government should, if possible, relieve unemployment, coupled with the idea that the city could expand its income at will has led many to assume that public work should be used to fill up the low points of employment in private work. It is argued that city work should be saved up until such times as it will tend to fill the gaps in employment. Unquestionably, it is the duty of the municipality, as well as other branches of government, to do this so far as possible. However, so far as the municipality is concerned, the value of public work as a means of meeting unemployment has been very greatly exaggerated. Practically the only work which the city can, to any extent, pile up, is its contract work. But the amount of money annually spent by Philadelphia for city contracts is small. In 1914, the value of contract work done for the city was about \$12,000,000. Of this, over \$2,000,000 was appropriated for services which must be performed regularly through the year,—such as street cleaning, garbage, ash collection, etc., etc. Of the remaining contracts, representing only \$10,000,000, one-half is spent to purchase supplies of various kinds,—chiefly coal, lumber, and groceries. While, undoubtedly, the hastening of purchases of public supplies would be of help in creating employment during periods of stress, and should be done as one of the best ways the city government can help, yet its influence will be but slight. Of the remaining \$5,000,000, the majority consists of paving, resurfacing and similar work, which can not readily be done in winter when employment is most serious. Only a small

part of the city work, such as the clearing up of the meadows in South Philadelphia for park use and building the bulkheads along the Schuylkill, can be done in winter. If \$1,000,000 worth of contract work could be saved annually to be done at emergency periods it could not, after materials had been bought, furnish employment to 15,000 persons for a month even at low rates. It would furnish little, if any, more employment than would be furnished during a year by a firm with 700 employees. It must furthermore be considered that a majority of the unemployed are persons whose sex, previous work, environment or physical incapacity make them unable to do the heavy out-door construction work that the city would chiefly have to offer. Even without taking into account the difficulty of doing many kinds of city work in the middle of winter, the minor value of municipal work as a means of meeting serious unemployment, is apparent. Obviously, one employing concern, even though it be the city government, can do little to handle the unemployment problem of the 50,000 employing concerns in Philadelphia. It is folly to comfortably delude ourselves into believing that a better distribution of municipal work affords a solution to our entire problem.

Despite this fact, however, a fundamental obligation *does* rest upon the legislative and executive branches of the city government to regard and make use of everything in municipal work which may affect unemployment. As much public work as is possible should be done at times when business is slack, but under the *usual business conditions*. Their fifty years experience in dealing with unemployment has taught European countries that *simon-pure* relief employment, i. e.—work especially made to furnish employment and conducted at low efficiency, and with little set standard of efficiency, is bad policy, save as a last resort. “Relief” work, as such, is more costly to the city than work done under normal conditions, despite the economy advantage frequently claimed because of lower wages and cheaper materials. The policy usually characteristic of relief work,—that of paying a wage from one to ten times as great as that actually earned,—is as degrading and degenerating in its effect on the job-

less man as is the mere hand-out of funds. Relief work is still further to be objected to on the grounds that, by providing no standard of competence, it opens an easy way for a corrupt administration to justify endlessly its own excessive expenditure and avoid the proper safeguards of the civil service law. Finally, relief work, even if capable of successful administration, is inadequate since it deals only with the resultant human suffering without touching the industrial disorganization responsible for it.

Therefore, whatever contribution the municipality makes by supplying public work should be done under the normal or approximately normal business methods.

With these conditions imposed, a municipal policy, which will reserve public work not of a pressing nature until the time of emergency, and which will assure the rapid starting of such work when needed, should be adopted by each successive incoming administration.

In addition to this the municipality can assist by doing many things of a minor nature which will assist in solving the unemployment question.

Just as any individual employer has an obligation (not always possible to attain) to furnish steady employment the year round, so should the municipality adopt the policy of all-the-year-round work for strictly municipal employees. This policy has been adopted in Wellesley, Mass.

The city should see to it that work and employment given out by such a tremendous construction operation as the building of the new subway system, should be doled out as regularly as possible. When that work draws to a close, it should taper down gradually so that an army of thousands of men should not be thrown on the city at once and the city's industries expected to absorb them instantly, as was the case in the building of the New York subway system.

Finally, the municipality should have some place, perhaps a new municipal farm with quarry attached, where residents of Philadelphia, who are unable to find work, can be temporarily employed after the public employment bureau has granted a certificate of character and worthiness. During the past winter,

many men were found, in order to secure assistance from the city, to have had themselves committed to the House of Correction. Many of these were doubtless looking for a warm place without too much tiresome muscular activity. However, many were perfectly sincere in their desire for work. There is no reason why the city should not have a separate farm with a quarry attached which would help supply municipal needs. To this farm, citizens of Philadelphia, capable of doing hard out-door work, could be admitted upon certificate of the public employment bureau, without stigma of disgrace, and work at a normal degree of efficiency and at a wage which would not encourage the permanency of such an occupation. Some limit should be placed on the length of time a person might be allowed to remain at such a farm.

#### A MUNICIPAL EMPLOYMENT BUREAU

One of the most obvious duties of the city government is the establishment of a municipal employment bureau. The primary function of such a bureau would be to assist in bringing men out of work into quick and easy communication with employers needing help. At present the responsibility for finding a new job rests almost entirely upon the man out of work. With little or no systematized help for the worker, the well-known hope-killing, degenerating process of hunting a job results. Under existing conditions the need for such a bureau as a labor clearing house is very real. It should be recognized that the ideal and eventual solution is, not to have men change their jobs no matter how cheaply or efficiently, but to have them remain steadily employed in their present jobs. The present chaotic condition of labor turn-over in most factories has accentuated the present need and exaggerated the ultimate value of public employment bureaus.

At present, the man out of work seeks a new position through one or more of five chief methods.

1. Inserting and answering newspaper ads.
2. Applying to the business agent of his union.
3. Applying at a private employment bureau or at the em-

ployment bureau conducted by organizations of employers in certain trades.

4. By means of introductions by friends.

5. By tramping the streets, applying at random.

The inadequacy of these methods for meeting the whole situation is almost too obvious to point out. If the man out of work answers newspaper ads, he is apt to find that he has arrived too late, or that as a result of the vagueness of the newspaper description, he has applied for a job for which he is not fitted. To insert an advertisement involves an expense that cannot well be stood by the person unemployed and is frequently not justified by results. Members of unions which include in their membership a high percentage of the trade, are in a much better position to be assisted to a new work if there is any. The fact is, however, that but a small percentage of the wage earners belong to unions, and the majority are, therefore, not in a position to profit by the union activities. The man out of work can use a private employment bureau, but each of these covers only a small corner of its particular field, so that it may or may not know where there is a suitable job. Moreover, if he secures a position, the applicant must pay a fee ranging from \$1 up. Even if no job is forthcoming, a fee of 50 cents is usually charged. Finally, the private employment bureaus make little analysis of positions with a view to fitting the men accurately so that satisfaction and permanence of employment shall be assured.

Applying at random for work, or where "help wanted" signs announce the need for new help frequently means a hope-killing, all-day hunt for a job that does not exist or else it means walking all around a job without finding it. The business of finding jobs is so unsystematic that hunting work, in a large percentage of cases, is very much like a game of "blind man's buff," with the hunt extending all over the city and even farther.

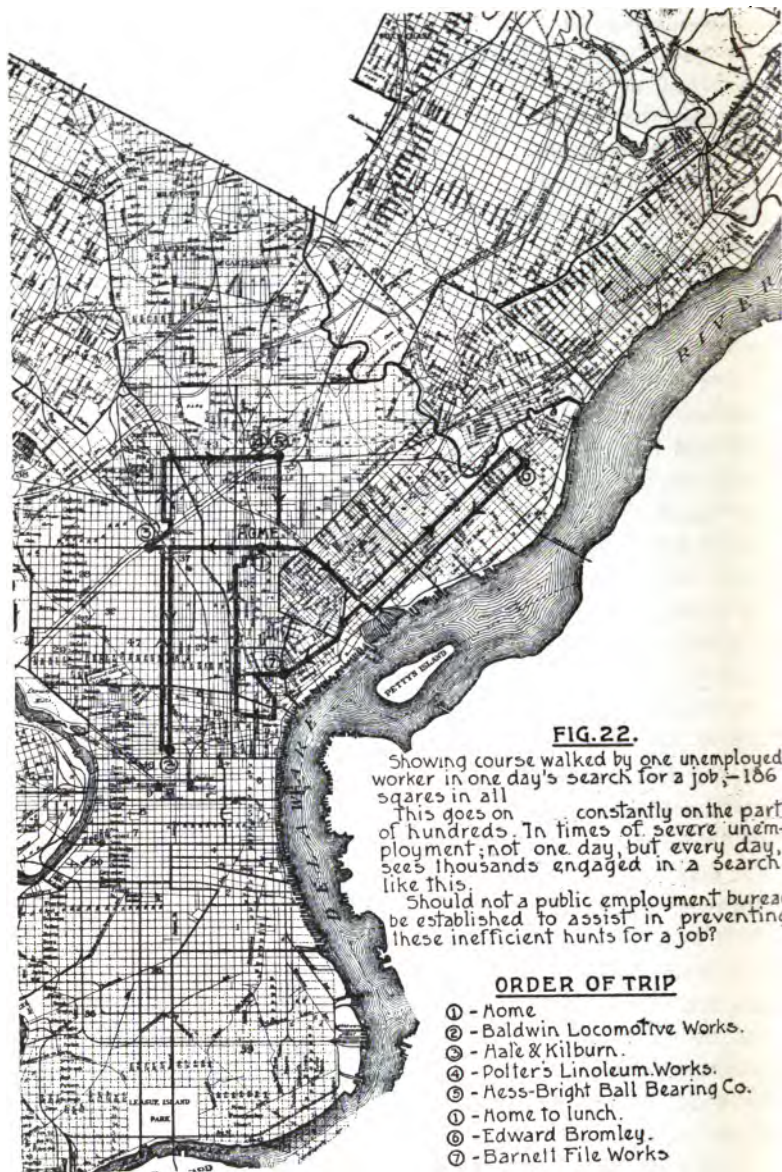
The stories of one day's experiences told by an employee selected at random in an axminster carpet mill, show how extravagant, discouraging and inefficient are the prevailing means of seeking work and how immeasurably superior it would be if all, or as much as possible of the work of job-hunting, could be central-

ized in one free public employment bureau,—which should be a great labor clearing house for the entire city. This man, who was young and unmarried and a day laborer, had been employed at the ——— hat factory. In the middle of February he was laid off with 24 others because of a lack of work. He remained unemployed till Easter. He was told that he would be taken on at the hat factory when times were better. The new employer gave him a good recommendation as to ability and steadiness. He reports that he had enough “rainy day” money saved up so that it lasted during his period of unemployment. He described one day’s travel in search for a job as follows:—

“I got up at 5:30 and went to Baldwin’s and was told no help was required. From there, I went to Hale & Kilburn at 18th and Lehigh Avenue and met with the same answer. I then walked to 2d and Erie Avenue to Potter’s Oil Cloth Works, and they needed no help. Then to the Hess Bright Company, at Front and Erie Avenue, and again met with the same result. Next I came back home at 2d and Lehigh Avenue for a meal. In the afternoon, I went to Edward Bromley’s; no help needed; from there to a firm at American and Girard Streets, with the same result. Then I called at the Barnett File Works, again with the same result. I tried two other places in the neighborhood, whose names I have forgotten, and none had any work. Often I would go out and after meeting with bad luck day after day, would say to myself at night, ‘the job has got to find me,’ but the next morning I would feel differently about it.” In all this man walked approximately 186 squares in this one day. The path covered by this man this day is shown in fig. 22.

The function of a public employment bureau should not be interpreted, as it frequently is, as a cure for unemployment. It does not create jobs. Only in indirect roundabout ways does it tend to cure unemployment. It can, however, greatly improve the situation of the unemployed by effecting quickly and cheaply the transition from one job to another. When the business of securing work for idle workers shall have been concentrated in public employment bureaus to the degree which it is in





**FIG. 22.**

Showing course walked by one unemployed worker in one day's search for a job;—186 squares in all

This goes on constantly on the part of hundreds. In times of severe unemployment; not one day, but every day, sees thousands engaged in a search like this.

Should not a public employment bureau be established to assist in preventing these inefficient hunts for a job?

#### ORDER OF TRIP

- ① - Home
- ② - Baldwin Locomotive Works.
- ③ - Hale & Kilburn.
- ④ - Polter's Linoleum Works.
- ⑤ - Hess-Bright Ball Bearing Co.
- ① - Home to lunch.
- ⑥ - Edward Bromley.
- ⑦ - Barnett File Works

Germany, the dispiriting, aimless, inefficient hunt for a job by thousands of individual unemployed workers should be a thing of the past.

The bureau should bring about a "dovetailing" between industries which require similar kinds of labor and in which the "off-season" of one corresponds with the "on-season" of another, as in the case mentioned above (page 105) of the printing concern and a department store. Such a plan would assure the retention of skilled workers by the firm and contribute to continuity of employment.

In other ways, the bureau can co-operate with employers to reduce the irregularity of employment in certain industries. The extreme irregularity of employment among Philadelphia's 4,000 dock workers has already been indicated. The unemployment arising from the over-crowding of the dock working trade in Liverpool has been largely reduced by an agreement entered into by the stevedores and shipping concerns and the public employment bureau. This agreement provides for common clearing houses along the docks from which firms employing such labor secure their help. When a call for workers comes, the officials of the clearing houses choose those who have been longest in the trade, all other things being equal. Thus an automatic limitation (as well as certain other artificial limitations) is placed on the entrance of newcomers into the trade. This reduces the over-crowding and consequent unemployment among dock workers. Some similar plan would be of advantage to Philadelphia. The public employment bureau should work out the details of such a scheme and secure the co-operation of employers and the large share of government support necessary for such a plan.

The Philadelphia employment bureau should be more than an employment bureau. It should be the official headquarters for the community's steady fight against unemployment. Its records and experience would constantly throw light on the problem. This information should be published and freely distributed to every agency that is interested in the subject.

The bureau should co-operate with educational institutions,

giving advice, etc. The institutions in turn would help forward the investigation, and dissemination of facts about unemployment.

A future department of the bureau should be especially concerned with the question of vocational guidance of young people. An efficient employment bureau would be so intimately conversant with the conditions of the labor market in each trade and with the qualities required of the worker for success in that trade that it should be able to offer and should maintain facilities for giving advice to young people about to enter industry and older persons who contemplate shifting from one trade to another. In conjunction with the Vocational Training Department of the Board of Education, information regarding the opportunity or lack of opportunity, as well as the requirements of particular trades, should be published in pamphlet form for the benefit of teachers, parents and others in a position to advise young persons about to enter industry. The need for work of this kind can be illustrated by the situation in the lace business. Here, despite the fact that the 300 or 400 lace weavers now in the business are a much larger number than the industry can keep anywhere near busy, there are approximately 100 boys and young men who, either as formal apprentices or in some other capacity, are now in line, hoping to enter the lace weavers' trade.

Since progress in reducing unemployment will necessarily be slow,—as one man puts it,—“will last us a thousand years,”—Philadelphia should look forward to the adoption, on either a state or city basis, of some form of insurance for wage-earners against unemployment,—such as is in vogue in many of the countries of Europe. In essence, this simply means that the government, the employer and the employee shall contribute so much per week to a common fund from which certain sums shall be paid out to those insured when unemployed. This insurance fund is usually administered by the public employment bureaus who offer work first, if it is available. The function of administering unemployment insurance will fall upon the local bureau. This insurance cannot, however, be practicably adopted until after the labor market has been organized and the procuring of jobs sufficiently centralized in the bureau. This is necessary so

that the bureau may be in a position to ascertain that there really is no work before unemployment insurance shall be granted.

A committee of the American Association of Labor Legislation, working in conjunction with the State Department of Labor and Industry and the Department of Public Works, secured the passage in June, 1915, of laws providing for a state system of public employment bureaus. One of the functions of this system of public employment bureaus is the regulation of private employment bureaus. By the terms of these acts, provision is made for the establishment and operation of a public bureau in any city, by the joint authority of the city and state. Plans are now on foot for the establishment of such a joint bureau in Philadelphia. As soon as Councils convene in the fall of 1915, an ordinance should be introduced authorizing the co-operation of the city authorities. In fact, the state has already started such a bureau. It is desired that the federal department of immigration, which now supports a public employment bureau in Philadelphia, can be induced to join in to help make one large bureau in Philadelphia, thus avoiding needless duplication of work.

It is hoped that by thus joining the efforts of three government agencies in the support of one bureau, a common error and cause of failure in public employment bureaus shall be avoided,—namely, insufficient funds to secure men of capability as superintendents, and to prosecute properly the duties of the bureau. Two other requirements for an ideal bureau, which are, however, frequently overlooked, are (1) a central location, on the first floor and with plenty of space, and (2) the choosing of employees under civil service rule.

#### A MUNICIPAL LODGING HOUSE

A suggestion commonly made is that the city should support a municipal lodging house. An additional permanent lodging house in Philadelphia is unnecessary since the Philadelphia Branch of the Society for Organizing Charity (up to the summer of 1915) permanently supports one wayfayers' lodge, at

which 175 homeless men can find shelter and food in return for a small amount of work. In addition to this, two missions offered floors where homeless men could "flop" during the past winter. Up to this spring, the Society for Organizing Charity maintained two lodges with a total capacity of 275. On only a few nights during the severe winter just past were these lodges filled to capacity. The existence of one (the smaller one has been closed) of these lodges leads to the conclusion that an additional permanent municipal lodging house would simply encourage and attract those of the unemployed who are neither willing nor able to work. However, prevalent practice and opinion in the larger cities of the country recommends that such lodges for homeless men should be taken over by the city, in toto, from the private charities. This would make possible better regulation and higher standards in such work. In times of unusual stress, whenever the facilities of the lodges of the Society for Organizing Charity should become entirely inadequate, the city should make provisions for the supplying of temporary accommodations, as a number of business men headed by H. T. Saunders did this past winter, and just as did New York City when its regular municipal lodging house became inadequate. Provision for administering these temporary quarters might be made with some existing charities, if the work of furnishing accommodations to homeless men is left to the societies.

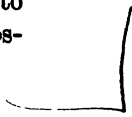
#### THE DUTY OF THE CONSUMER

The entire responsibility for dealing with unemployment cannot be shouldered off on to employers and the city government. Consumers should realize that by following extreme styles in clothes, household furnishings, etc., they are making steady production difficult to the manufacturer, and are, therefore, contributing to unemployment.

They should also realize that when industry is slack, there rests upon the individuals the obligation to purchase as much and as widely as possible against future need, so that industry will be started up and employment again furnished. By "buying now," "hiring now," "repairing now," "building now," "cleaning

up now," in slack times, both business firms, householders and individuals in general can contribute in the sanest way towards the relief of unemployment. A campaign along this line, similar to the Consumers' League "shop early" campaign, would be desirable. The Consumers' League is the logical agency to undertake such a campaign.

Employers should realize that the effect of every expenditure either for labor or materials in one firm or industry tends to spread and stimulate other industries whose improved prosperity reacts on the original firm or industry.

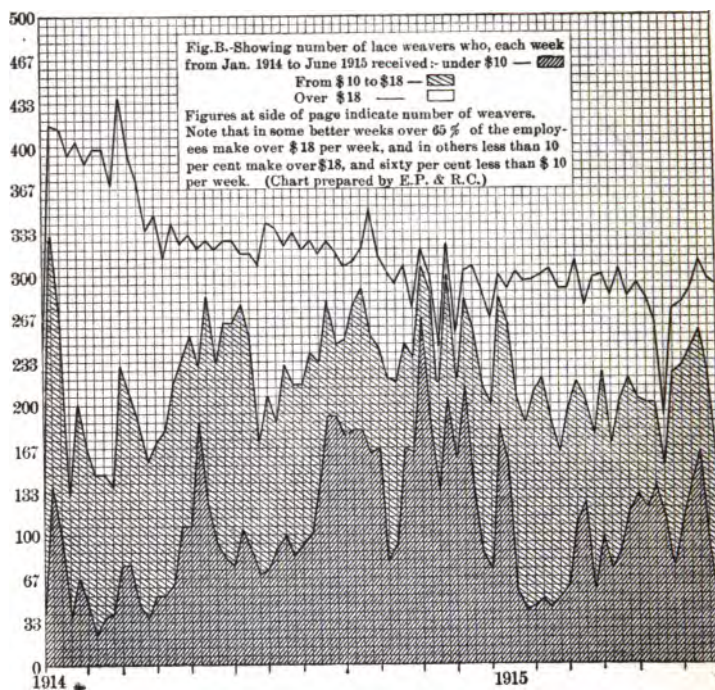


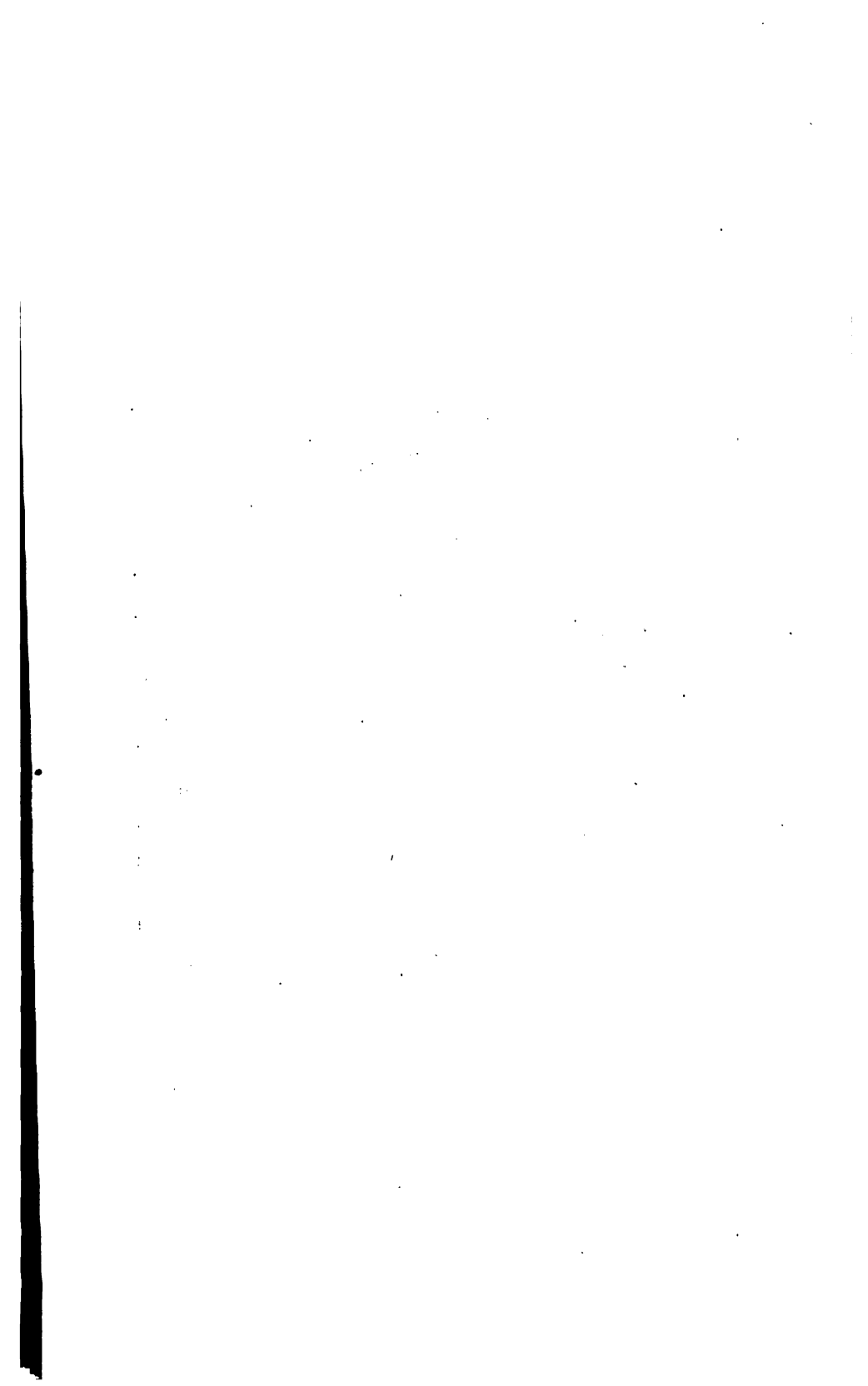


## APPENDIX

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000



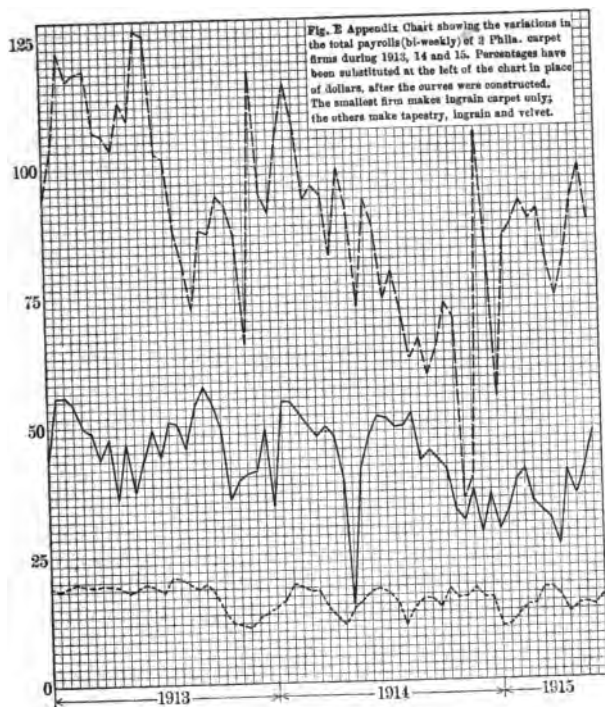












## METROPOLITAN BLANK.

I. Blank filled out by agents of the Metropolitan Life Insurance Company in the unemployment canvass conducted by the company for the City of Philadelphia.

## METROPOLITAN LIFE INSURANCE COMPANY

Number in family..... Number of wage-earners in family.....  
 Number of wage-earners now working-- Number of wage-earners out of work--  
     part time .....  
     full time .....

Facts about WAGE-EARNERS OUT OF WORK on.....1915

Male or Female.	Age.	OCCUPATION.		Date of Last Employment.	Cause of Unem- ployment.
		Industry or Business.	Trade or Particular Kind of Work.		
1.....					
2.....					
3.....					
4.....					
5.....					
6.....					

Debit Number..... District..... Page in SEE OVER FOR  
 Collection Book..... INSTRUCTIONS

- I. The form is divided by a heavy, black line into two parts. The upper part calls for the facts inquired about,—*whether there is anyone out of work or not*. The lower half is to be filled in only when there is some member of the family out of work. Please understand that these two parts are *equally important*.
- II. A slip should be handed in to the Superintendent for every family visited, whether there is any one out of work or not.
- III. The number of wage-earners should include all persons able to work.
- IV. Sex, age, occupation, date of last employment and cause of unemployment should be given *only for persons in the family who are out of work*.
- V. Example of how to record "occupation":  

Industry or Business	Trade or Particular Kind of Work
Carriage Factory	Painter
- VI. Cause of unemployment: State whether due to sickness, lack of work or other reasons.

## SURVEY OF UNEMPLOYMENT IN PHILADELPHIA, PA., MARCH, 1915,

BY

THE METROPOLITAN LIFE INSURANCE COMPANY

Early in March Mayor Rudolph Blankenburg invited the Metropolitan Life Insurance Company of New York to conduct an investigation of unemployment in Philadelphia similar to the one made by the company for the Mayor's Committee of the City of New York. This investigation was made by the company's agents who were furnished with inquiry blanks and instructed to secure the facts of unemployment in the families of policy-holders whom they visited on their weekly rounds.

The results of the canvass are summarized in the following table:—

TABLE I

SUMMARY FACTS OF INVESTIGATION OF UNEMPLOYMENT IN PHILADELPHIA,  
MARCH, 1915

Number of families canvassed.....	79,058
Number of persons canvassed in families.....	346,787
Number of wage-earners in families.....	137,244
Number of full-time wage-earners.....	96,190
Number of part-time wage-earners.....	26,907
Number of unemployed wage-earners.....	14,147
Per cent. of full-time wage-earners.....	70.1
Per cent. of part-time wage-earners.....	19.6
Per cent. of unemployed wage-earners.....	10.3

It would appear from this table that unemployment, either partial or total, affected about 30 per cent. of the wage-earners canvassed. The proportion of total unemployed, namely, 10.3 per cent., is comparatively low when compared with the results from other cities where the Metropolitan Life Insurance Company conducted similar investigations. Thus, in New York City, the rate was 18.0 per cent.; in Chicago, 13.3 per cent.; in St. Louis, 13.6 per cent.; and 11.1 per cent. in Pittsburgh. In Pittsburgh the per cent. of part-time wage-earners was very much in excess of that found in Philadelphia, namely 29 per cent. Taking the fifteen cities together in the company's investigation, the unemployment rate was found to be 13.4 per cent. The conditions in Philadelphia, therefore, seem to have been among the best for the large cities canvassed.

It should be remembered that the 346,787 persons in the families investigated in this survey form 20.7 per cent. of the total population of the city. Furthermore, as the census covered all sections of Philadelphia, the results obtained may be considered characteristic of the entire city. On the basis of the figures obtained, we may estimate the total amount of unemployment in Philadelphia with safety. According to the 1910 census, the number of persons engaged in gainful occupations was 711,169; this was 45.9 per cent. of the total population of Philadelphia at that time.



Assuming that this proportion of wage-earners to population has continued, the number of wage-earners would now be about 769,700 persons. If, as we have reason to believe, the rate of unemployment, 10.3 per cent. found in this investigation, holds true for the entire population of Philadelphia, the number of unemployed would be about 79,000. In the same way, the number of part-time wage-earners would be 150,000. In other words, it is estimated that over 229,000 persons were either partially or totally unemployed in Philadelphia in March, 1915.

Additional information was obtained in this investigation which has made it possible to classify the unemployed persons by sex, occupation and industry, and also by duration and cause of unemployment.

It thus appears that of the 12,550 unemployed persons for whom data were available, 10,068 or 80.2 per cent. were males and 2,482 or 19.8 per cent. were females. If this proportion holds for the total unemployed, the number of unemployed males for the entire city would be 63,400 and the number of females 15,600. From the returns of the 1910 census the number of male wage-earners in Philadelphia in 1915 was 552,900, the number of female wage-earners 216,800. The male unemployment rate for the city would, therefore, be 11.5 per cent. and for the females only 7.2 per cent. It is quite possible that the differences in the rates of the two sexes may be due to different seasonal conditions in the occupations engaged in by the two sexes respectively.

TABLE II

NUMBER AND PER CENT. OF WAGE-EARNERS OUT OF WORK—PHILADELPHIA, PA., 1915—METROPOLITAN LIFE INSURANCE COMPANY—STATISTICAL BUREAU.

Duration of unemployment.	Persons.		Males.		Females.	
	Number.	Per cent.*	Number.	Per cent.*	Number.	Per cent.*
1 to 7 days-----	228	1.9	175	1.9	53	2.2
8 to 13 days-----	201	1.7	151	1.6	50	2.1
14 to 30 days-----	1,091	9.1	817	8.5	274	11.6
31 to 60 days-----	1,730	14.4	1,307	13.5	423	17.9
61 to 90 days-----	2,178	18.1	1,687	17.5	491	20.8
91 to 120 days-----	1,782	14.8	1,406	14.6	376	16.0
121 to 180 days-----	2,155	17.9	1,843	19.1	312	13.2
181 days and over-----	2,641	22.0	2,263	23.5	378	16.0
Total known -----	12,006	100.0	9,649	100.0	2,357	100.0
Unknown -----	544	—	419	—	125	—
All durations -----	12,550	—	10,068	—	2,482	—

\*Per cent. distribution of known cases only.

1,597 additional unemployed persons were not included in this tabulation because facts of industry, occupation and sex were not stated.

Table II shows the duration of the period of unemployment in Philadelphia. Most of the unemployment is for comparatively long periods. The largest group, for example, is that whose unemployment lasted over 180 days or a half year; they form 22 per cent. of the total. These data are given in another form in Table III which presents the cumulative periods of unemployment.

TABLE III

CUMULATIVE NUMBER AND PER CENT. OF WAGE-EARNERS OUT OF WORK—  
PHILADELPHIA, PA., 1915—METROPOLITAN LIFE INSURANCE COMPANY—  
STATISTICAL BUREAU.

Duration of unemployment.	Persons.		Males.		Females.	
	Number.	Per cent.*	Number.	Per cent.*	Number.	Per cent.*
Over 180 days.....	2,641	22.0	2,263	23.5	378	16.0
Over 120 days.....	4,796	39.9	4,106	42.6	690	29.3
Over 90 days.....	6,578	54.8	5,512	57.1	1,066	45.2
Over 60 days.....	8,756	72.9	7,199	74.6	1,557	66.1
Over 30 days.....	10,486	87.3	8,506	88.2	1,980	84.0
Over 13 days.....	11,577	96.4	9,323	96.6	2,254	95.6
Over 7 days.....	11,778	98.1	9,474	98.2	2,304	97.8
1 day or more.....	12,006	100.0	9,649	100.0	2,357	100.0
Unknown.....	544	—	419	—	125	—
Total.....	12,550	—	10,068	—	2,482	—

\*Per cent. distribution of known cases only.

1,597 additional unemployed persons were not included in this tabulation because facts of industry, occupation and sex were not stated.

It would appear that more than half, 54.8 per cent., of all the unemployed had been idle over 90 days, and that close to three-quarters, namely, 72.9 per cent. were unemployed over 60 days. Only about 13 per cent. of all the unemployed had been out of work a month or less. An examination of the figures shows that these proportions vary somewhat with the two sexes.

Table IV presents the number of unemployed classified by sex, industry and occupation and by duration and cause of unemployment. Of the 12,550 persons for whom data were available, 8,300 or 66.1 per cent. were engaged in the manufacturing and mechanical industries; 1,579 or 12.6 per cent. in trade; 1,081 or 8.6 per cent. in transportation; 8.2 per cent. in domestic or personal service, and only 3.3 per cent. in professional or public service. The largest individual industries concerned are as follows: Building trades with 2,751 males; the textiles with 877 males and 714 females; wholesale and retail trades with 1,081 males and 436 females; iron and steel and their products; 1,222 males, 32 females.

TABLE IV  
 SURVEY OF UNEMPLOYMENT IN PHILADELPHIA.—1915  
 OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT  
 NOTE:—1,587 additional unemployed persons were not included in this tabulation because facts of industry, occupation and sex were not stated.

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
All Occupations—Males and Females.....	12,550	228	201	1,091	1,730	2,178	1,782	2,155	2,641	544	10,883	1,254	56	30	78	749
Males .....	10,068	175	151	817	1,307	1,687	1,406	1,843	2,263	419	8,803	1,005	49	27	72	612
Females .....	2,482	53	50	274	423	491	376	312	378	125	2,080	249	7	3	6	137
AGRICULTURE, FORESTRY AND ANIMAL HUSBANDRY .....	122	2	1	9	15	13	17	31	26	8	98	15	1	—	—	8
Farmers and Farm Laborers.....	32	—	—	—	6	1	5	12	6	2	25	4	1	—	—	2
Gardeners .....	67	2	1	4	7	9	9	19	12	4	53	9	—	—	—	5
Other Workers in Agriculture, Forestry and Animal Husbandry .....	23	—	—	5	2	3	3	—	8	2	20	2	—	—	—	1
MANUFACTURING AND MECHANICAL INDUSTRIES .....	6,940	116	97	535	885	1,127	999	1,328	1,587	286	5,865	616	28	20	23	408
Building Trades—	1,340	27	22	148	210	263	201	176	218	75	1,159	82	2	3	—	94
Bricklayers .....	239	30	29	188	324	442	435	641	538	124	2,300	207	11	6	8	164
Building Laborers .....	1,062	2	4	13	16	35	44	75	42	8	202	16	1	4	—	16
Carpenters .....	428	13	8	50	134	153	152	274	251	27	917	78	8	1	—	63
		4	5	29	51	68	81	80	82	28	356	45	—	—	—	27

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	Unemployed.	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Building Trades—Continued—</i>																
Cement and Concrete Workers.....M.	55	—	—	3	6	6	9	15	10	6	48	1	—	—	—	6
Drivers.....M.	28	1	—	—	6	7	5	5	8	1	21	4	2	—	—	1
Electricians.....M.	52	—	3	4	7	10	7	8	9	4	44	4	—	—	1	3
Hod Carriers.....M.	18	—	1	3	1	2	4	3	4	—	15	2	1	—	—	—
Painters, Paperhangers and Decorators.....M.	328	2	3	24	29	54	66	80	45	22	288	23	—	—	—	17
Plasterers.....M.	94	1	—	4	10	10	15	23	19	2	81	5	—	—	—	8
Plumbers, Gas and Steamfitters.....M.	276	4	5	34	44	61	32	41	36	19	246	16	2	1	—	11
Roofers.....M.	68	3	—	16	11	12	4	12	9	1	9	5	1	—	—	3
Tile Layers.....M.	14	—	—	—	—	4	2	2	6	—	13	—	—	—	—	1
Other Building Workers.....M.	86	—	—	8	9	20	11	13	22	6	70	8	1	—	2	8
F.....F.	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Chemicals and Allied Products.....M.	50	1	1	6	10	5	6	6	15	—	41	7	—	2	—	—
F.....F.	9	—	—	1	1	—	1	1	—	1	8	1	—	—	—	—
Chemical and Drug Workers.....M.	50	1	1	6	10	5	6	6	15	—	41	7	—	2	—	—
F.....F.	9	—	—	1	1	—	1	1	4	1	8	1	—	—	—	—
Clay, Glass and Stone Products.....M.	167	—	—	1	—	1	1	2	1	—	4	2	—	—	—	—
F.....F.	6	—	2	5	7	11	2	9	8	1	38	7	—	—	—	—
Workers in Brick Yards.....M.	45	—	3	4	5	5	7	10	14	2	41	6	—	—	—	3

## OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 14 Days.	15 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Clay, Glass and Stone Products—Con.—</i>																
Glass Workers -----M.	50	—	—	1	—	1	1	1	1	—	3	2	—	—	—	—
F.	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Marble and Stone Outters -----M.	60	1	1	2	3	14	9	13	17	—	49	7	1	—	—	3
Other Workers in Clay, Glass and Stone Products -----M.	6	1	—	—	—	—	1	—	3	—	5	1	—	—	—	—
F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Clothing -----</i>																
M.	387	5	5	35	51	71	58	63	79	20	327	25	—	—	2	33
F.	97	2	1	14	10	16	22	14	15	8	86	2	—	—	—	9
Suits, Coats, Cloaks and Overall -----F.	257	2	3	27	27	55	37	49	45	12	217	16	—	—	1	23
Outters -----M.	44	—	—	4	2	8	11	6	11	2	40	—	—	—	—	4
Pressers and Spongers -----M.	21	—	—	3	1	5	5	2	5	—	19	1	—	—	—	1
Other Workers on Suits, Coats, Cloaks and Overall -----M.	17	—	1	2	—	5	—	5	3	1	15	1	—	—	—	1
F.	219	2	2	22	26	45	32	42	37	11	183	14	—	—	1	21
Makers of Waists, Underwear, Neck- ties, etc. -----M.	44	—	—	4	2	8	11	6	11	2	40	—	—	—	—	4
F.	14	—	1	—	3	3	2	1	4	—	11	2	—	—	—	1
Hatters, Wool and Felt -----M.	206	1	—	2	2	3	7	3	2	—	18	—	—	—	—	2
F.	106	1	—	2	2	1	1	—	—	—	6	1	—	—	—	2
F.	9	1	3	3	2	1	1	—	—	—	1	6	1	—	—	2

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Clothing—Continued—</i>																
Shirt, Collar and Cuff Makers.....M.	10	—	—	2	1	2	1	1	4	—	8	1	—	—	—	1
F.	24	1	1	4	4	4	3	5	2	—	22	1	—	—	—	1
Food and Kindred Products.....M.	24	5	5	10	19	24	11	21	26	3	101	14	1	—	—	7
F.	51	3	1	5	9	14	10	3	4	2	46	2	—	—	—	2
Bakers.....M.	47	2	1	5	7	10	4	7	10	1	35	9	—	—	—	3
F.	6	—	—	1	—	—	1	2	2	—	6	—	—	—	—	—
Bakery Drivers.....M.	14	3	1	1	3	3	—	3	—	—	13	—	—	—	—	—
Dairy Workers.....M.	13	—	2	—	2	—	—	2	5	2	10	—	1	—	—	2
Candy Makers.....M.	24	—	—	—	2	8	4	3	6	—	22	2	—	—	—	—
F.	36	1	1	4	5	13	8	1	2	1	34	1	—	—	—	1
Other Workers in Food Products.....M.	26	—	1	3	5	3	3	6	5	—	21	3	—	—	—	2
F.	8	1	—	—	4	1	1	—	—	1	6	1	—	—	—	1
Iron and Steel and Their Products.....M.	222	24	18	84	130	174	191	220	340	43	1,069	125	8	1	5	74
F.	28	—	1	2	2	8	5	3	6	5	23	1	—	—	—	3
Automobile Factories.....M.	53	4	—	9	9	7	5	14	8	2	44	8	1	—	1	4
Machinists.....M.	27	1	—	4	7	3	4	4	3	1	22	4	—	—	—	1
Other Workers in Automobile Fac- tories.....M.	31	3	—	5	2	4	1	10	5	1	22	4	1	—	1	3
Workers in Car Shops.....M.	72	3	1	4	8	10	22	13	10	1	63	5	—	—	—	4

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.													
	Number Persons Unemployed.										1 to 7 Days.	8 to 14 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.
<i>Iron and Steel and Their Products—</i>																								
<i>Continued—</i>																								
Outlery, File and Saw Makers.....M.	21	1	1	1	1	1	1	1	1	3	1	2	10	1	12	9	—	—	—	—	—	—	—	—
F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Workers in Iron Foundries and Iron Works.....M.	16	1	—	4	1	1	1	2	5	1	1	2	5	1	12	4	—	—	—	—	—	—	—	—
M.	60	1	—	6	5	10	6	13	18	1	6	13	18	1	47	9	1	—	—	—	—	—	—	3
Iron and Steel Mill Operatives.....M.	205	1	2	8	10	15	23	41	93	6	10	15	23	6	191	7	—	—	—	—	1	—	—	6
Locomotive Works.....M.	31	—	1	3	1	—	3	3	19	1	3	3	19	1	28	3	—	—	—	—	—	—	—	5
Laborers.....M.	116	—	1	3	7	9	16	27	49	4	3	7	16	27	49	4	106	3	—	—	—	—	—	5
Machinists.....M.	58	1	—	2	2	6	10	11	25	1	2	2	6	10	11	25	1	55	1	—	—	1	—	1
Other Employees of Locomotive Works.....M.	304	4	7	20	39	52	44	37	86	15	20	39	52	44	37	86	15	294	39	4	—	4	—	23
Machine Shops.....M.	284	3	7	13	39	47	42	54	81	13	13	39	47	42	54	81	13	278	35	4	—	4	—	23
Machinists.....M.	20	1	—	2	—	5	2	3	5	2	—	2	3	5	2	3	5	2	16	4	—	—	—	—
Other Employees of Machine Shops.....M.	290	5	2	13	25	52	34	70	49	6	25	52	34	70	49	6	224	21	1	—	—	—	—	14
Ship and Boat Building.....M.	70	1	—	4	3	13	8	26	14	1	4	3	13	8	26	14	1	54	7	—	—	—	—	9
Laborers.....M.	38	1	—	5	5	4	6	8	8	1	5	5	4	6	8	8	1	32	5	—	—	—	—	1
Machinists.....M.	37	—	—	—	5	16	4	10	2	—	—	—	—	—	37	—	—	—	—	—	—	—	—	—
Riveters.....M.	115	3	2	9	12	19	16	26	24	4	9	12	19	16	26	24	4	101	9	1	—	—	—	4
Other Workers in Ship and Boat Building.....M.	27	—	1	3	4	5	5	1	8	—	—	—	—	—	19	7	—	19	7	—	—	—	—	1
Wagon and Carriage Builders.....M.	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

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INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 14 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Iron and Steel and Their Products—</i>																
<i>Continued—</i>																
Other Iron and Steel Industries.....M.	199	4	4	11	28	19	24	36	63	10	162	16	1	—	—	20
F.	81	—	1	1	2	8	5	3	6	5	27	1	—	—	—	3
Boilermakers.....M.	25	—	—	1	1	4	4	3	11	1	21	2	—	—	—	2
Machinists.....M.	27	1	—	2	2	1	6	9	4	2	24	2	—	—	—	1
Other Workers in Other Iron and Steel Industries.....M.	147	3	4	8	25	14	14	24	48	7	117	12	1	—	—	17
F.	81	—	1	1	2	8	5	3	6	5	27	1	—	—	—	3
<i>Leather and its Finished Products.....M.</i>	211	1	2	15	24	36	35	31	59	8	177	17	—	2	—	15
F.	41	—	—	6	5	4	8	9	8	1	36	3	—	—	—	2
Leather Belt, Case and Pocketbook Makers.....M.	13	—	—	1	1	3	2	1	5	—	11	2	—	—	—	—
F.	7	—	—	2	2	1	2	—	—	—	4	1	—	—	—	2
Lasters in Shoe Factories.....M.	69	1	—	2	6	9	16	13	20	2	64	3	—	1	—	1
Other Workers in Shoe Factories.....M.	67	—	1	7	9	15	11	5	17	2	53	8	—	—	—	6
F.	24	—	—	4	2	1	5	6	6	—	22	2	—	—	—	—
Workers in Tanneries.....M.	54	—	1	3	7	9	3	10	17	4	42	4	—	—	—	8
F.	10	—	—	—	1	2	1	3	2	1	10	—	—	—	—	—
Other Workers in Other Leather Products.....M.	8	—	—	2	1	—	3	2	—	—	7	—	—	1	—	—
Liquors and Beverages.....M.	33	—	—	3	4	6	5	4	11	—	21	12	—	—	—	—



# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	Number Persons Unemployed.	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	(Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, (Own Fault.	Other Reason.
<i>Liquors and Beverages—Continued—</i>																
Brewery Workers.....M.	33	—	—	3	4	6	5	4	11	—	21	12	—	—	—	—
Lumber and its Remanufacture.....M.	196	5	6	19	28	31	26	35	38	8	163	17	—	—	3	13
Furniture Factories.....M.	105	3	6	8	17	16	15	20	16	4	90	7	—	—	2	6
Cabinet Makers.....M.	31	—	2	3	5	4	4	6	5	2	25	3	—	—	—	3
Upholsterers.....M.	27	1	1	1	6	7	2	2	5	2	25	1	—	—	—	1
Other Workers in Furniture Factories.....M.	47	2	3	4	6	5	9	12	6	—	40	8	—	—	2	2
Piano and Organ Makers.....M.	7	—	—	2	1	1	2	1	—	—	7	—	—	—	—	—
Saw Mill Workers.....M.	26	—	—	2	2	5	3	3	9	2	19	8	—	—	—	4
Other Workers in Other Woodworking Industries.....M.	53	2	—	7	8	9	6	11	13	2	47	7	—	—	1	3
<i>Metals and Metal Products Other Than Iron and Steel.</i>																
Iron and Steel.....M.	87	2	3	7	9	11	19	13	20	3	70	11	—	—	1	5
Brass Mill Workers.....F.	5	—	—	—	2	2	1	—	—	—	5	—	—	—	—	—
Jewelry Factory Workers.....M.	16	—	—	1	—	1	4	2	6	2	13	1	—	—	—	2
.....M.	14	—	—	3	3	2	3	1	2	—	10	3	—	—	1	—
.....F.	2	—	—	—	1	1	—	—	—	—	2	—	—	—	—	—
Tinware Factory Employees.....M.	16	—	1	3	1	1	3	—	7	—	11	4	—	—	—	1
Workers in Other Metal Products.....M.	41	2	2	—	5	7	9	10	5	1	36	3	—	—	—	2
.....F.	3	—	—	—	1	1	1	—	—	—	3	—	—	—	—	—

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

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INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
Paper ----- M.	67	2	2	4	12	11	10	12	13	1	53	8	—	—	1	5
F.	56	1	1	9	7	12	5	9	9	3	43	9	—	—	—	4
Paper Box Factory Employees ----- M.	31	2	—	1	4	4	4	9	6	1	24	3	—	—	—	4
F.	26	—	—	1	4	8	3	5	4	1	23	2	—	—	—	1
Makers of Envelopes, Tags, Paper Bags, etc. ----- M.	8	—	—	—	—	3	1	1	3	—	8	—	—	—	—	—
F.	18	—	1	5	2	2	1	1	4	2	11	4	—	—	—	3
Paper Mill Workers ----- M.	28	—	2	3	8	4	5	2	4	—	21	5	—	—	1	1
F.	12	1	—	3	1	2	1	3	1	—	9	3	—	—	—	—
Printing and Bookbinding ----- M.	158	2	3	10	33	25	17	25	86	7	136	15	—	—	—	7
F.	36	—	1	7	3	3	5	2	8	1	31	3	—	—	—	2
Compositors ----- M.	18	—	—	1	2	1	—	4	9	1	15	1	—	—	—	2
Other Printing Employees ----- M.	121	2	3	8	29	19	16	17	23	4	103	13	—	—	—	5
F.	15	—	—	2	3	2	3	1	3	1	13	—	—	—	—	2
Bookbinding Employees ----- M.	19	—	—	1	2	5	1	4	4	2	18	1	—	—	—	—
F.	21	—	1	5	5	1	2	1	6	—	18	3	—	—	—	—
TEXTILES ----- M.	877	20	7	94	129	144	110	127	203	39	764	65	3	7	5	43
F.	714	16	13	80	136	138	96	90	105	40	623	34	1	3	—	48
Carpet Mill Workers ----- M.	125	1	—	15	18	20	19	16	31	5	113	8	—	—	—	3
F.	43	—	—	4	5	5	6	4	10	6	33	1	—	2	1	7

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.		Number of Persons at Each Specified Period of Unemployment.							Cause of Unemployment.					
	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
TEXTILES—Continued—															
Cotton Mill Operatives.....M.	6	—	1	—	—	—	4	1	—	4	—	—	1	—	1
.....F.	9	2	1	1	—	2	1	1	1	7	—	—	—	—	2
Dyers and Cleaners of Textiles.....M.	62	—	1	7	7	8	9	11	16	3	51	5	1	—	4
.....F.	8	—	—	—	—	1	—	2	—	1	2	—	—	—	—
Knitting Mills.....M.	164	3	2	13	23	26	35	36	4	147	8	—	—	—	9
.....F.	232	5	5	18	51	72	49	88	14	250	17	—	—	—	25
Borders.....M.	31	—	1	—	4	6	4	6	9	1	28	2	—	—	1
Knitters.....M.	19	2	—	1	2	1	2	2	9	—	17	1	—	—	1
.....F.	49	—	1	4	9	17	6	5	6	1	43	2	—	—	4
Menders.....M.	7	—	—	—	2	4	—	1	—	7	—	—	—	—	—
.....F.	28	—	—	1	4	7	8	4	3	1	21	5	—	—	2
Loopers.....M.	7	—	—	—	—	4	1	2	—	7	—	—	—	—	—
.....F.	52	1	2	3	12	18	9	2	3	2	46	2	—	—	4
Weavers.....M.	26	—	—	3	2	1	7	8	3	2	23	2	—	—	1
.....F.	8	—	—	2	2	1	—	2	1	—	7	—	—	—	1
Toppers.....M.	4	—	1	—	3	—	—	—	—	—	4	—	—	—	—
.....F.	40	—	2	—	9	11	8	7	3	—	36	3	—	—	—
Other Employees of Knitting Mills.....M.	70	1	—	9	10	10	9	16	14	1	61	3	—	—	6
.....F.	115	4	—	8	15	13	13	18	24	10	97	5	—	—	13

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
TEXTILES—Continued—																
Lace and Embroidery Workers.....M.	5	—	—	—	1	1	1	—	2	—	3	2	—	—	—	—
F.	29	1	—	1	6	6	4	5	6	—	27	2	—	—	—	—
Silk Mill Workers.....M.	19	—	—	3	4	—	4	—	8	—	18	1	—	—	—	—
F.	16	—	—	5	5	1	1	1	2	1	15	—	—	—	—	1
Woolen Mill Workers.....M.	16	2	—	1	3	3	1	2	3	1	14	1	—	—	—	1
F.	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—
Other Textile Operatives.....M.	480	15	4	54	73	86	83	59	110	26	414	30	2	5	4	25
F.	320	8	8	51	65	53	34	39	44	18	238	12	1	1	—	13
MISCELLANEOUS INDUSTRIES																
M.	636	16	10	49	97	116	77	89	155	27	510	82	4	2	2	36
F.	293	6	4	23	30	65	47	43	56	19	243	25	1	—	—	24
Cigar Makers.....M.	45	1	1	4	10	14	7	2	4	2	33	7	—	—	—	5
F.	35	—	3	1	4	9	4	4	5	1	30	4	—	—	—	1
Gas Works Employees.....M.	84	—	—	3	6	8	5	3	7	2	26	4	—	—	—	4
F.	1	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
Oil Works Employees.....M.	99	4	1	5	24	20	9	15	18	—	87	11	—	—	1	—
Rubber Factory Workers.....M.	10	—	—	1	1	2	1	1	5	—	8	2	—	—	—	—
Tobacco Factory Employees.....M.	10	—	—	1	3	2	1	1	2	—	7	1	1	—	—	1
F.	2	—	—	—	—	2	—	—	—	—	2	—	—	—	—	—
Workers in Electrical Supplies.....M.	32	2	—	5	4	4	5	5	6	1	23	7	—	—	—	2
F.	32	2	—	5	4	4	5	5	6	1	23	7	—	—	—	2

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.						
	Number Persons Unemployed.	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.	
MISCELLANEOUS INDUSTRIES—Cont.— <i>Industry Not Stated.</i>	M. 323	6	6	21	38	53	44	45	91	19	255	44	8	1	1	19	
	F. 244	4	1	21	26	54	42	32	48	16	203	20	—	—	—	21	
	M. 46	—	—	5	5	5	5	5	20	5	34	8	2	1	—	1	
	M. 2	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	
	F. 196	2	1	17	19	47	34	24	38	14	160	18	—	—	—	18	
	M. 186	4	5	7	24	89	20	29	48	10	151	22	—	—	1	12	
	F. 17	1	—	2	2	2	1	4	4	1	15	1	—	—	—	1	
	M. 81	1	—	2	5	5	7	4	6	1	28	1	—	—	—	2	
	F. 65	1	—	7	6	8	11	11	17	4	47	12	—	—	—	6	
	M. 24	1	1	2	3	5	7	—	5	—	21	2	1	—	—	—	
Other Workers in Miscellaneous Industries	M. 83	3	2	9	12	13	5	14	22	3	71	6	—	1	—	5	
	F. 11	2	—	1	—	—	1	3	2	2	8	—	1	—	—	2	
TRANSPORTATION	M. 1,056	9	14	102	132	176	153	177	254	39	816	150	4	3	14	69	
Express Company Employees	F. 25	2	—	3	7	1	4	3	8	2	13	6	1	—	4	1	
Postal Employees	M. 52	1	1	3	7	8	14	4	9	5	42	5	1	—	1	3	
M. 10	—	—	—	—	1	2	1	1	5	—	6	3	—	—	1	—	
Railroad Transportation	M. 220	2	3	20	22	31	29	21	80	6	142	56	—	—	—	3	
F. 4	—	—	2	2	2	—	—	—	—	—	3	—	—	—	—	19	

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Railroad Transportation—Continued—</i>																
Clerks and Bookkeepers.....M.	29	—	—	2	1	5	6	4	11	—	21	4	—	—	—	4
.....F.	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—
Engineers and Firemen.....M.	23	—	—	1	5	4	1	1	11	—	12	6	—	—	1	4
Laborers.....M.	65	—	1	5	6	8	11	6	25	3	53	10	—	—	—	3
Railroad Trainmen.....M.	39	1	5	7	7	6	8	3	13	1	22	12	—	—	2	3
Other Railroad Employees.....M.	64	1	2	7	8	8	8	7	26	2	35	24	—	—	—	5
.....F.	3	—	—	2	1	—	—	—	—	—	2	1	—	—	—	—
<i>Road, Street and Bridge Transportation</i>																
.....M.	646	6	8	67	80	104	97	29	130	25	531	68	2	2	8	35
Chauffeurs—Industry Not Stated.....M.	108	2	4	10	12	15	16	23	21	5	90	6	2	1	2	7
Garage Employees.....M.	20	—	—	3	4	4	2	1	5	1	17	2	—	—	1	1
Drivers.....M.	347	2	2	41	53	67	48	43	78	13	291	83	—	—	8	20
Livery Stable Employees.....M.	40	2	1	7	3	3	3	3	6	13	2	31	8	1	—	—
Street Railway Employees.....M.	26	—	—	1	4	2	7	7	4	1	12	10	—	—	2	2
Other Road, Street and Bridge Transportation Workers.....M.	105	—	1	5	4	13	21	44	14	3	90	9	—	—	1	5
.....F.	30	—	1	3	4	2	4	8	7	1	21	6	—	1	1	1
Telegraph and Telephone Employees.....M.	21	2	—	1	5	1	4	3	3	2	10	5	1	—	4	1

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	Number Persons Unemployed.	1 to 7 Days.	8 to 15 Days.	16 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Transportation—Continued—</i>																
Water Transportation -----M.	98	—	1	9	18	29	£	14	17	2	74	12	1	—	—	11
Longshoremen -----M.	79	—	1	7	16	25	6	12	10	2	60	10	—	—	—	9
Other Water Transportation Workers -----M.	19	—	—	2	2	4	2	2	7	—	14	2	1	—	—	2
TRADE -----M.	1,123	25	22	102	160	237	126	182	222	53	904	119	9	4	15	78
Banking, Brokerage and Insurance -----M.	450	6	8	42	64	121	85	40	60	24	364	60	3	—	—	23
Insurance Agents -----M.	38	—	1	1	9	7	4	2	14	—	25	10	2	1	—	—
Office Employees -----M.	9	—	1	1	—	3	1	—	3	—	9	—	—	—	—	—
Office Employees -----F.	17	—	—	1	4	4	2	1	5	—	10	5	1	1	—	—
Office Employees -----M.	21	—	1	—	5	3	2	1	9	—	15	5	1	—	—	—
Office Employees -----F.	9	—	1	1	—	3	1	—	3	—	9	—	—	—	—	—
Real Estate Employees -----M.	10	—	—	2	2	1	1	1	3	—	8	1	—	—	—	—
Real Estate Employees -----F.	5	—	—	2	1	—	—	—	1	1	4	1	—	—	1	—
Wholesale and Retail Trade -----M.	1,031	25	21	99	149	229	121	179	205	53	571	103	7	3	14	78
Wholesale and Retail Trade -----F.	486	6	7	39	63	118	84	40	56	23	351	59	3	—	—	23
Merchants and Dealers -----M.	101	1	—	8	12	23	14	17	17	9	74	17	1	—	—	9
Wholesale and Retail Trade Employees -----M.	980	24	21	91	137	206	107	162	183	44	79	91	6	3	14	69
Wholesale and Retail Trade Employees -----F.	436	6	7	39	63	118	84	40	56	23	351	59	3	—	—	23

# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

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INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.		Cause of Unemployment.														
	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
		1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.	
<i>Wholesale and Retail Trade—Cont.—</i>																	
Butcher Store Employees.....M.	65	3	3	9	16	9	4	8	12	1	53	6	—	—	1	5	
F.	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	
M.	13	—	—	2	—	1	3	4	2	1	12	1	—	—	—	—	
F.	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	
<i>Coal Yards—</i>																	
Drivers for Coal Yards.....M.	47	—	2	3	10	7	5	9	9	2	39	3	—	1	—	4	
Other Coal Yard Employees.....M.	7	—	1	1	—	—	—	1	3	1	4	2	—	—	1	—	
F.	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	
<i>Department Stores—</i>																	
Drivers.....M.	20	—	—	1	2	9	6	1	1	—	19	—	—	—	1	—	
Other Department Store Employees.....M.	97	4	3	8	13	39	8	5	17	—	86	4	—	—	—	7	
F.	190	2	1	20	26	64	34	11	24	8	153	31	1	—	—	5	
Dry Goods Store Employees.....M.	20	—	—	2	—	3	3	2	7	3	14	4	1	—	1	—	
Grocery Store Employees.....M.	138	8	2	17	25	27	13	21	16	4	106	9	1	1	2	9	
F.	17	1	—	1	5	3	—	3	2	2	11	3	1	—	—	2	
Ice Wagon Drivers.....M.	53	2	—	3	1	8	8	14	15	4	46	4	—	—	—	5	
Other Store Employees.....M.	238	5	5	18	26	60	29	51	51	13	193	35	2	—	8	20	
F.	96	1	3	8	7	23	25	7	10	7	78	7	—	—	—	10	





# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

INDUSTRY, OCCUPATION AND SEX.	Number Persons Unemployed.	Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		Number of Persons at Each Specified Period of Unemployment.								Cause of Unemployment.						
		1 to 7 Days.	8 to 14 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Federal Employees—Continued—</i>																
Custom House, Army and Navy.....M.	17	—	—	—	2	3	—	2	8	2	9	—	1	—	4	3
Navy Yard and Arsenal Employees.....M.	11	—	—	2	2	2	1	1	8	—	8	2	—	—	1	—
.....F.	3	1	—	—	1	—	—	—	—	—	3	—	—	—	—	—
Maintenance of Law and Order—																
Watchmen, Not Elsewhere Classified.....M.	61	1	—	4	4	14	11	8	14	5	39	16	—	—	—	6
PROFESSIONAL SERVICE	111	1	4	14	12	14	15	21	26	4	95	9	—	—	1	6
.....M.	100	1	5	17	9	16	9	18	20	5	79	13	1	—	—	7
.....F.	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Public Entertainment	72	1	4	9	9	9	11	17	16	2	68	6	—	—	1	8
.....M.	24	—	2	3	2	4	3	6	4	—	23	—	—	—	—	1
.....F.	48	—	2	6	7	5	8	11	12	2	45	6	—	—	—	7
Actors and Theatre Employees.....M.	31	—	8	4	4	8	3	6	6	2	26	4	—	—	—	1
.....F.	15	—	1	3	—	2	3	3	3	—	14	—	—	—	—	1
Motion Picture Employees.....M.	13	—	1	4	1	1	1	2	3	—	10	1	—	—	1	1
.....F.	6	—	—	—	2	2	—	1	—	—	6	—	—	—	—	—
Musicians.....M.	34	1	1	1	4	5	7	9	7	—	32	1	—	—	—	1
.....F.	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Teachers.....F.	13	—	—	—	1	2	2	2	5	1	6	5	—	—	—	2
Trained Nurses.....F.	52	1	3	14	4	6	3	8	9	4	41	6	1	—	—	4
Other Professional Service.....M.	33	—	—	5	3	5	4	4	10	2	27	3	—	—	—	3
.....F.	11	—	—	—	2	4	1	2	2	—	9	2	—	—	—	—



# OCCUPATIONS OF THE UNEMPLOYED CLASSIFIED BY SEX AND BY PERIODS OF UNEMPLOYMENT

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INDUSTRY, OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	Number Persons Unemployed.	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.
<i>Personal Service—Continued—</i>																
Restaurant Business.....M.	59	8	2	6	17	12	7	7	5	—	54	3	—	—	—	2
F.	32	—	1	4	7	3	4	2	10	1	25	5	—	—	1	1
Waiters and Waitresses.....M.	28	2	2	3	6	5	4	4	2	—	25	2	—	—	—	1
F.	24	—	1	3	6	2	4	2	5	1	19	4	—	—	1	—
Other Restaurant Employees.....M.	31	1	—	3	11	7	3	3	3	—	29	1	—	—	—	1
F.	8	—	—	1	1	1	—	—	5	—	6	1	—	—	—	1
Saloon Business—																
Saloonkeepers, Bartenders and Other Saloon Employees.....M.	109	8	3	13	22	9	21	15	18	—	95	4	2	—	—	8
Laundry Workers.....M.	29	—	—	2	7	6	1	4	9	—	24	3	1	—	1	—
F.	63	2	1	6	13	13	5	7	10	1	54	9	—	—	—	—
Other Workers in Personal Service.....M.	30	—	3	2	6	1	5	7	4	2	28	1	—	—	—	3
INDUSTRIES NOT SPECIFIED.....M.	13	2	—	—	1	3	2	2	3	—	10	1	—	—	—	2
F.	5	—	—	1	—	1	1	1	1	—	4	—	—	—	—	1
Workers in Industries Not Specified.....M.	13	2	—	—	1	3	2	2	3	—	10	1	—	—	—	2
F.	5	—	—	1	—	1	1	1	1	—	4	—	—	—	—	1

OCCUPATIONS OF THE UNEMPLOYED, CLASSIFIED BY SEX AND PERIODS OF UNEMPLOYMENT  
METROPOLITAN LIFE INSURANCE COMPANY, STATISTICAL BUREAU  
(Occupations Considered Without Distinction of Industry.)

OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	1 to 7 Days.	8 to 13 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.	
All Occupations—Males and Females.....	12,550	228	201	1,091	1,730	2,178	1,782	2,155	2,641	544	10,883	1,254	56	30	78	749
Males.....	10,068	175	151	817	1,307	1,687	1,406	1,843	2,263	419	8,303	1,006	49	27	72	612
Females.....	2,482	53	50	274	423	491	376	312	378	125	2,080	249	7	3	6	137
Agents, Solicitors and Canvassers—																
Males.....	40	1	2	4	8	6	7	11	1	26	10	1	1	1	1	1
Females.....	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Blacksmiths and Horseshoers—Males.....	73	1	—	8	8	1	11	12	27	5	58	10	2	1	—	2
Boilermakers.....Males.....	42	1	1	5	4	4	4	4	22	1	36	3	—	1	—	2
Bookkeepers.....Males.....	72	1	1	10	11	11	15	16	7	56	10	—	—	—	—	6
Females.....	32	—	1	3	5	4	3	5	10	1	30	1	—	—	—	1
Cabinet Makers.....Males.....	32	—	2	3	5	4	4	6	2	26	8	—	—	—	—	3
Carpenters.....Males.....	497	7	10	34	56	81	80	94	94	32	412	51	—	—	—	34
Cashiers.....Males.....	5	—	—	1	1	2	1	1	—	—	4	1	—	—	—	—
Females.....	17	—	1	1	5	2	1	1	2	—	4	—	—	—	—	—
Clarks.....Males.....	435	11	5	52	64	102	55	65	96	15	375	44	5	3	8	30
Females.....	233	8	5	31	40	85	55	22	32	13	331	45	2	—	—	8
Drivers.....Males.....	693	12	5	63	125	128	93	102	138	27	573	64	4	2	8	43
Electricians.....Males.....	55	—	3	4	8	10	7	9	10	4	47	4	—	—	1	3
Foremen and Overseers.....Males.....	41	1	5	4	4	12	1	2	12	4	29	8	—	—	—	4
Females.....	3	—	—	—	—	1	—	1	—	—	2	—	—	—	—	—

OCCUPATIONS OF THE UNEMPLOYED, CLASSIFIED BY SEX AND PERIODS OF UNEMPLOYMENT  
METROPOLITAN LIFE INSURANCE COMPANY, STATISTICAL BUREAU  
(Occupations Considered Without Distinction of Industry.)

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OCCUPATION AND SEX.	Number of Persons at Each Specified Period of Unemployment.										Cause of Unemployment.					
	1 to 7 Days.	8 to 14 Days.	14 to 30 Days.	31 to 60 Days.	61 to 90 Days.	91 to 120 Days.	121 to 180 Days.	181 Days and Over.	Unknown.	Cannot Find Work.	Sick or Disabled.	Lazy, Won't Work.	Strike or Lockout.	Discharged, Own Fault.	Other Reason.	
Inspectors	18	1	1	1	1	2	8	3	1	1	4	8	—	—	1	1
Males	18	1	1	1	1	2	8	3	1	1	4	8	—	—	1	1
Females	22	1	3	2	7	1	1	1	6	21	1	—	—	—	4	107
Laborers	1,944	26	119	238	300	262	459	453	60	1,049	175	8	1	5	88	5
Males	1,944	26	119	238	300	262	459	453	60	1,049	175	8	1	5	88	5
Mechanists	578	8	9	68	80	92	91	168	22	471	60	4	—	2	2	2
Males	578	8	9	68	80	92	91	168	22	471	60	4	—	2	2	2
Messengers	100	2	4	11	12	23	7	19	3	89	4	—	—	—	—	4
Males	100	2	4	11	12	23	7	19	3	89	4	—	—	—	—	4
Packers	23	1	2	3	4	8	2	5	7	25	5	—	—	—	—	2
Males	23	1	2	3	4	8	2	5	7	25	5	—	—	—	—	2
Females	44	3	7	7	6	6	8	9	—	36	4	—	—	—	—	4
Painters, Paperhangers and Decorators	357	2	3	33	59	73	88	52	23	312	26	—	—	—	—	19
Males	357	2	3	33	59	73	88	52	23	312	26	—	—	—	—	19
Porters	55	2	1	5	10	9	4	11	12	46	5	1	—	1	2	2
Males	55	2	1	5	10	9	4	11	12	46	5	1	—	1	2	2
Salemen	177	2	4	13	17	43	20	28	39	11	139	21	3	3	11	11
Males	177	2	4	13	17	43	20	28	39	11	139	21	3	3	11	11
Shipping Clerks	61	—	2	4	6	13	11	11	12	2	53	5	1	—	2	2
Males	61	—	2	4	6	13	11	11	12	2	53	5	1	—	2	2
Stationary Engineers	87	2	9	6	11	17	13	25	4	65	14	—	—	1	7	7
Males	87	2	9	6	11	17	13	25	4	65	14	—	—	1	7	7
Stationary Firemen	70	3	3	10	13	11	5	16	—	58	11	1	—	—	—	—
Males	70	3	3	10	13	11	5	16	—	58	11	1	—	—	—	—
Stenographers	15	1	1	6	6	2	2	1	2	15	—	—	—	—	—	—
Males	15	1	1	6	6	2	2	1	2	15	—	—	—	—	—	—
Females	79	2	—	12	19	13	9	13	5	61	11	1	—	—	6	6
Timemiths	12	1	3	—	—	2	—	6	—	8	8	—	—	—	1	1
Males	12	1	3	—	—	2	—	6	—	8	8	—	—	—	1	1
Watchmen	67	1	4	4	14	11	9	18	6	42	18	—	—	—	7	7
Males	67	1	4	4	14	11	9	18	6	42	18	—	—	—	7	7
All Other Occupations	4,485	91	399	602	747	607	783	1,001	188	3,685	442	19	18	38	283	283
Males	4,485	91	399	602	747	607	783	1,001	188	3,685	442	19	18	38	283	283
Females	1,998	44	223	352	367	267	262	809	102	1,686	185	4	3	6	115	115

NOTE:—1,597 additional unemployed persons were not included in this tabulation because facts of industry, occupation and sex were not stated.

Table V is perhaps more interesting than the preceding one. It presents the number of unemployed by "occupation" without reference to industry. This table is made necessary by the fact that often the same occupation occurs in various industries. It is important to bring such persons together under one head. This is true of clerks, cashiers, stenographers, carpenters, who may be employed in any number of different industries. The largest single occupation are the "laborers," of whom there were 1,944 unemployed. There were 693 drivers, 578 machinists, 751 male and female clerks and 497 carpenters.

The causes of unemployment will always present serious difficulties to the investigator. Yet, it has been possible to determine, with a fair degree of accuracy, the importance of the several factors in the total unemployment in Philadelphia. Thus, 83 per cent. of the total unemployed were apparently able and willing to work but could not find employment. This large percentage points distinctly to economic disturbances. The remaining 17 per cent. may be grouped under several heads. The most important of these minor causes are sickness and disability which accounted for 10 per cent. of the total unemployment. The same percentage holds for both males and females. Only 30 cases out of the total of 12,550 unemployed were due to strikes or lock-outs. Labor disputes did not, therefore, play any serious part in unemployment in Philadelphia at this time.

It is hoped that a repetition of this investigation of unemployment will be arranged by the city authorities at regular intervals in the future to determine whether the conditions described above are only temporary, or whether they are characteristic of the industries of Philadelphia and require special treatment for their control.

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LETTER FROM EDITOR OF TEXTILE MANUFACTURERS' JOURNAL, SHOWING  
FREQUENCY OF SHIFTINGS IN DEMAND IN THE TEXTILE INDUSTRIES

377-379 Broadway.

New York, August 2, 1915.

Mr. Joseph H. Willits,  
Dept. of Public Works,  
City Hall,  
Phila., Pa.

My Dear Mr. Willits:—

I have not had a chance ere this to take up the matter in yours of the 23d regarding the rise and fall of certain lines of textiles which you regard as an influence in the unemployment of labor, and which doubtless have had more or less effect.

There are so many revolutions in the textile industry that it is impossible to comprehend them all in any brief statement, but perhaps I can add a few to those you mention. This is more or less haphazard and not at all thought out.

To take up one item that you speak of in your letter, viz., the fact that carpets have given way to rugs, it must also be remembered that the wool rug industry has suffered by the competition of grass and other fibre rugs. In connection with the increase in the demand for silk and light hosiery would say that the same tendency was evident in the case of neckties, where artificial silk was largely used. This, however, has again almost disappeared.

In the matter of knit goods we find that a great many changes have taken place which are revolutionary. For instance, there have been some radical alterations in outer garments, such as sweaters. These did take the place of overcoats with the general public in a very great degree, but in turn have been supplanted in many instances by the mackinaw. These again in turn, as far as women are concerned, have given place to the pure silk and artificial silk sweater which is now in increasing demand. Another piece of female apparel which is seldom seen to-day is the old style jersey, and the fashion in bathing suits has also eliminated a good many knit goods garments, although there are certain styles of suits that are still being made from knit fabrics. I am told, however, that the jersey is coming back and that bathing suits are being made from knit goods fabrics again.

The matter of outdoor sports has had a very marked influence on the character of garments worn. So-called sport garments are decidedly in prominence both for men and women. Knit clothing, I believe, is going to be one of the features of the near future. Golf suits are being made from this to-day and a large number of sport coats for men. Getting down to underwear, there is also a decided change in under garments from the two piece to the union suits. The center of union suit manufacture is in the central west, particularly Ohio, and many large mills are featuring this product, advertising it widely to the consumer. Of course, you know that the condition of heated offices and steam heated apartments makes for lighter underwear as well as lighter outer clothing. The day of the heavy wool underwear is past almost entirely with the exception of certain markets where out-door life necessitates heavy weight goods. Another development in the underwear field has been the rise of fabric underwear, such as B. V. D. This has taken the place of much knitted material.

Outing demand has worked in a rather peculiar way in regard to hosiery. Bicycle hose formerly constituted a very formidable product. Although this character of hose is now used to some extent for golf, the demand is by no means as large as it was. Nevertheless wool socks are in use by golfers, and this may develop into a fair-sized demand.



TABLE

SHOWING THE EFFECT OF LOST TIME ON WAGES. FIGURES COLLECTED BY THE  
CHICAGO MAYOR'S COMMITTEE ON UNEMPLOYMENT

"EXTENT OF UNEMPLOYMENT, AS SHOWN BY LABOR UNION REPORTS"

"The comparison of the actual earnings of members of trade unions with the earnings they would receive if they were employed steadily indicates the amount of unemployment. This also shows the probable effects of unemployment."

UNION NUMBER.	Actual Earnings in a Year.	Possible Annual Earnings if Steadily Employed.
1.....	\$792	\$936
2.....	575	1,350
3.....	600	900
4.....	750	1,000
5.....	650	850
6.....	520	782
7.....	750	1,750
8.....	600	1,500
9.....	1,100	1,300
10.....	700	1,435
11.....	—	1,200
12.....	1,200	1,816
13.....	800	1,040
14.....	540	700
15.....	1,150	1,155
16.....	750	900
17.....	650	1,000
18.....	500	800
19.....	—	—
20.....	—	1,050
21.....	500	900
22.....	210*	315*
23.....	—	—
24.....	1,650	1,700
25.....	900	953.16
26.....	—	—
27.....	—	—
28.....	1,400	1,400
29.....	1,100†	1,100†
30.....	1,200	1,800

\* With board and lodging.

† There is evidently some mistake in this answer, for the union reported that the average member lost 2 months' work and that 75% of the members have work the year round. This report is therefore not included in the totals.

## WEIGHT NUMBERS

To be used in determining percentage of employment and unemployment in Philadelphia manufacturing industries as a whole. The industries here represented include nearly two-thirds of the wage earners in manufacturing industries in the city.

Hosiery . . . . .	5.7
Carpet . . . . .	3.2
Bread . . . . .	2.1
Clothing (men's) . . . . .	4.2
Clothing (women's) . . . . .	5.2
Other textiles . . . . .	14.2
Foundry and machine shop products . . . . .	6.8
Leather . . . . .	2.1
Printing and publishing . . . . .	6.2
Railway equipment . . . . .	8.1

TABLE

Census figures showing the variation in the number employed at different months in the year 1909 in manufacturing industries of the United States.

WAGE EARNERS IN MANUFACTURING INDUSTRIES IN THE UNITED STATES  
IN 1909.

Month.	Number.	Per cent. of maximum	Number of unemployed.
January -----	6,210,068	88.6	796,790
February -----	6,297,627	89.9	709,226
March -----	6,423,517	91.7	583,336
April -----	6,437,633	91.9	569,220
May -----	6,457,279	92.2	549,574
June -----	6,517,469	93.0	489,384
July -----	6,486,676	92.6	520,177
August -----	6,656,933	95.0	349,920
September -----	6,896,765	98.5	108,068
October -----	6,997,090	99.9	9,768
November -----	7,006,853	100.0	—
December -----	6,990,652	99.8	16,201

TABLE

Figures showing the percentage of members of labor unions in New York State who were unemployed at monthly intervals during the last ten years. These figures are collected regularly by the New York State Department of Labor.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean for year.
1904.....	22.0	18.8	18.9	12.7	10.9	10.8	8.6	7.7	6.8	6.4	7.1	15.4	12.1
1905.....	18.0	15.8	14.6	8.2	5.9	6.7	6.8	5.4	4.4	8.6	4.0	9.2	8.5
1906.....	11.8	12.4	8.9	5.0	4.1	8.2	4.7	4.0	4.8	4.5	5.8	18.8	6.8
1907.....	19.0	17.4	15.5	8.5	7.7	6.2	5.4	7.7	9.6	16.1	20.0	30.5	13.6
1908.....	35.1	35.9	35.9	32.2	30.6	28.6	25.2	22.2	23.0	21.8	20.0	25.9	28.0
1909.....	26.4	24.6	21.2	15.1	12.7	13.1	10.0	8.2	11.0	9.6	9.5	17.7	14.9
1910.....	16.5	15.5	17.4	12.6	11.8	11.7	8.1	7.5	8.4	13.4	15.0	25.6	13.6
1911.....	24.9	22.9	24.1	19.6	24.0	17.7	18.1	9.5	8.9	9.8	17.6	31.9	18.7
1912.....	24.4	16.1	17.4	11.9	18.5	21.0	19.0	6.8	4.9	6.0	14.1	23.1	15.2
1913.....	17.5	13.2	20.7	20.4	21.7	20.9	19.7	18.2	15.0	18.1	26.1	38.8	20.9
1914.....	31.0	29.3	26.5	22.4	21.4	24.8	—	—	—	—	—	—	25.8*

\*Mean for six months.

TABLE

Compiled results of a canvass conducted among labor unions by the Mayor's Commission on Unemployment in Chicago in 1911. Note, according to this table, the importance of unemployment.

## EXTENT OF UNEMPLOYMENT AS SHOWN BY LABOR UNION REPORTS.

No. of Union.	Time lost by average work-man.	Per cent. of members employed the entire year.	Are there in all seasons some members unemployed?	Number of months the trade is			Is the trade seasonal?
				Busy.	Slack.	No Work.	
1	2 mo.	99*	No	9	3	0	Yes
2	5 mo.	15	Yes	4	6	2	Yes
3	3.5 mo.	0	No	7-8.5	3.5-5	3	Yes
4	—	75	Yes	—	—	—	No
5	3.5 mo.	60	—	8-10	2-4	2-3	Yes
6	4 mo.	5	Yes	8	4	4	Yes
7	3 mo.	50	—	—	—	—	*
8	2-4 mo.	10	Yes	6-8	3-4	0	Yes
9	1.5 mo.	75	Yes	9-10	2-3	§	Yes
10	6 mo.	8	—	4	3	4	Yes
11	†	50	No	9	3	0	Yes
12	4 mo.	70	—	8	4	4	Yes
13	3 mo.	10	—	9	3	3	Yes
14	2-5 mo.	85	No	7	5	0	Yes
15	7 days	100	Yes	6	6	0	No
16	2-3 mo.	60	Yes	6	6	0	Part
17	3 mo.	5	—	—	—	—	No
18	3 mo.	60	Yes	9	3	§	Yes
19	3-4 mo.	5-10	—	8-9	1	3-4	—
20	—	—	Yes	—	—	0	No
21	5 mo.	10	—	5	5	5	Yes
22	—	0	Yes	6-7	5-6	4	Yes
23	0	100	Yes	12	0	0	No
24	2 days	100	Yes	12	0	0	No
25	2-3 mo.	66	No	6	5	1	Yes
26	—	—	—	—	—	—	—
27	—	—	—	—	—	—	No
28	0 mo.	95	Yes	12	0	0	No
29	2 mo.	75	—	7	5	0	Yes
30	4 mo.	85	Yes	8	4	4	Yes

\* Not entirely.

§ Depends on factory demands.

† Between seasons.

PARTIAL LIST OF FIRMS AND INDIVIDUALS INTERVIEWED IN THE  
PREPARATION OF THIS REPORT.

E. M. Hopkins, Employment Manager, The Curtis Publishing Co.  
 R. R. P. Bradford, Superintendent of the "Lighthouse."  
 J. Howell Cummings, President, The John B Stetson Co.  
 Edmund Roberts, Vice-President, Henry Disston & Sons Co.  
 W. P. Barba, Vice-President, The Midvale Steel Co.  
 Joseph Dorrance, Joseph F. Campbell Co.  
 Franklin Brewer, General Manager, Wanamaker's.  
 H. J. Tily, General Manager, Strawbridge & Clothier.  
 H. C. Towle, New York Shipbuilding Co.  
 Lawrence Fell, Franklin Printing Co.  
 Wm. L. Turner, Quaker Lace Co.  
 Wm. Bromley, John Bromley & Sons.  
 H. A. Romberger, Hosiery Manufacturer.  
 Park Moore, Brown Knitting Co.  
 Thos. E. Brown, Radmoor Hosiery Co.  
 Harry C. Aberle, Hosiery Manufacturer.  
 Robert Blood, John Blood & Co.  
 Robert Pilling, Prop., John Blood & Co.  
 A. W. Newman, Treasurer, Notaseme Hosiery Manufacturers.  
 Rufus Scott, Vice-President, Wm. F. Taubel, Inc., Hosiery Manufacturers.  
 John W. Patterson, Prop., Argyle Knitting Mills.  
 Chas. F. Bochmann, F. A. Bochmann & Co.  
 Harry Terry, Bush & Terry, Carpet Manufacturers.  
 Clement Read, Canterbury Carpet Co.  
 —Carson, George Carson, Carpet Manufacturers.  
 John Culbertson & Sons, Woollen and Worsted Cloth Manufacturers.  
 James Dobson, President, John and James Dobson, Inc.  
 James Speck, President, Dresden Carpet Co.  
 Mitchell Stead, Supt., Folwell Bro. & Co.  
 Jas. H. Gay, President, John Gay's Sons, Inc.  
 Archibald Campbell, Hardwick & Magee.  
 C. H. Masland & Sons, Carpet Manufacturers.  
 Overbrook Carpet Co., Carpet Manufacturers.  
 R. E. Vickerman, Axminster Carpet Co.  
 Mr. Pollock, Jr., Pollock-Huston Co., Carpet Manufacturers.  
 Theo. F. Miller, President, Star & Crescent Co.  
 Paul E. Sutro, President, E. Sutro & Son Co.  
 Geo. Taubel, Taubel Bros.  
 Wm. J. Wall, Nicetown Dye Works.  
 E. J. Schoettle, Schoettle Paper Box Co.  
 John M. Williams, Secretary, Fayette R. Plumb, Inc.  
 —Collins, A. M. Collins Mfg. Co.

Wm. Brown Co., Hosiery Manufacturers.  
 James M. Dodge, President The Link Belt Co.  
 Charles A. Brinley, President, American Pulley Co.  
 Samuel Fels, Fels & Co.  
 Joseph Steele, Wm. Steele & Sons Co.  
 Wm. De Kraft, Baldwin Locomotive Works.  
 Snellenburg, Clothing Co.  
 A. B. Kirschbaum Co.  
 Riley M. Little, Society for Organizing Charity.  
 Mrs. J. Willis Martin, Emergency Aid Committee.

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LETTER RECEIVED FROM A FORMER PHILADELPHIA TEXTILE WORKER IN  
 RE UNEMPLOYMENT IN PHILADELPHIA.

September 6, 1915.

Joseph H. Willits, Esq.,

Dear Sir:—

I have read of the effort to assist employment in Philadelphia industry. I spent 20 years in Philadelphia textile work. I left only a few years ago, 2½ years, on account of uncertain conditions. I worked in various departments, starting at .75 per day, up to foreman. I make the following statements in the hope that it may do someone some good.

I divided Philadelphia and its manufacturing outskirts into two classes,—the complete mills of a better class and the hand to mouth manufacturers who run part or all of a mill of a poor to fair equipment. These latter are many times more numerous than the former. If you will investigate the continuous, or not, operation of Philadelphia plants as compared with those in New England or New York States, I think you will find the latter will show for 10 to 15 years a better average of work or working hours per year than Philadelphia. They will show a much less percentage of changing help. They will show a better grade output as a whole, though not in the abstract, as Philadelphia has many special plants that are important and high class. Among operatives generally the feeling is that Philadelphia is a bad place to work because they are usually the first to shut down and the last to start up, and that there is a greater liability to lost time and a very uncertain condition owing to the disposition of most foremen, to continually, with or without provocation, change help. There is a general lack of disposition among the foremen around Philadelphia to assist by instruction and condition in making the help more skillful and valuable. They prefer to "fire" operatives. In many cases jobs are bought and paid for. In many cases the foremen are the most incompetent men in the country. In many cases the equipment and working conditions absolutely preclude working only under very favorable business conditions. Therefore, they only get the overflow of business. Employees making application for work at the offices are badly treated

except in flush business times. The disposition to "hire" and "fire" has caused an abnormal amount of ill feeling and organization for their possible protection and the disposition to strike under slight provocation, or misunderstanding is greatly increased and is much more than will be found in outside or Eastern districts. It is generally conceded among the employees that in most plants there is no consideration for employees, and they can expect to be laid off or "fired" at any time. Wages are higher in certain lines of work than outside of Philadelphia. Conditions have made it thus. Employees are more given to consider the average wages received in a year than formerly as against the wages per day or week. There is a lack of "disposition," if such it may be termed, among employers and owners of such plants to look carefully into the working conditions with a view to improvement, and to insist that the operatives produce work as wanted whether conditions are right or wrong. Too much is left to the foreman, who, if he is competent, finds work and machinery such as to make it difficult to get results that will compare in cost and quality with properly equipped plants. The action of the man who runs a plant with the skill that cannot be criticized will prove many things that may help your campaign. The frank statements of men who have seen what they should of well equipped plants will help much. Conceit is more rampant among Philadelphia manufacturing people than outside owing to the fact that they produce in certain plants goods that they find difficulty in producing outside of Philadelphia. There is great disposition to consider plants and people outside of Philadelphia as inferior to those in Philadelphia. They ignore certain factors used to advantage by outside manufacturers in the way of cost and product, if such conditions appear to differ from Philadelphia methods. Many classes of goods, originally prominent in Philadelphia, have been captured by outside manufacturers instead of increasing the Philadelphia product. The reasons for this will assist Philadelphia. Employees change frequently because they frequently need two or three mills to enable them to work as a whole perhaps three-fourth of the time. Lack of daylight, or artificial light, properly applied to their work, is a serious drawback.

The woolen mills of the United States represent in a way some of Philadelphia conditions. Many woolen mills in the United States have no good reason for their existence. They are rat holes to pour money into. Bad management, lack of light on work requiring the maximum of light, bad work of every description, work that will not weave fit to be called weaving, abominable loom fixers who reduce the wages of the weavers; excessive fines solely caused by mismanagement in the first place and aggravated along the way by the other conditions, have caused such a changing of operatives that the average woolen mill worker's reputation for changing jobs cannot be equalled by any other class of workers.

The American woolen have done more for the woolen business to get conditions right than any other factor, and yet there are scores of woolen

mills who refuse to see the "daylight." This applies to the United States as a whole, but the factors involved are similar in principle to those involved in manufacturing generally in Philadelphia. If the most clever woolen manufacturing man in the United States should pay a visit incog. to a score of the worst woolen mills and offer his services as an expert to place their plant on a better basis, he would have difficulty in getting a "look in" in any of the plants. The American Woolen Company will eventually force these people out of business. Investigation will show you that similar conditions have been active for many years among Philadelphia manufacturers of a certain class. You will find so much intelligence, perception of bad conditions, ability to suggest things of advantage (this being precluded owing to the conditions noted) among thousands of ordinary workers in textile lines that it is worth while to dig some of this up. Reasons for their changing jobs. Conditions by comparison in different jobs and sections of the United States from the operative's point of view.

My sympathies are naturally with and for Philadelphia and its operatives, and whatever can be done to better same would please me. My employment relations in Philadelphia were mostly very pleasant, but I have seen much of conditions that were not right or pleasant or profitable. I only left because I believed I should have more chance for permanent employment outside of Philadelphia, though not at higher wages per week, but more weeks per year. The waste in many Philadelphia plants is abnormal and in some cases due to old ideas and improper equipment and an obstinate conceit that their superior skill personally will accomplish the best results. These statements do not or cannot reflect on the many high-class manufacturing plants in Philadelphia which represent all that should be included in their respective lines, but they cannot cover the defects of the others. Why should a New England manufacturing plant operate more weeks in 10 years than a Philadelphia plant? Why should their operatives be more permanent and consequently as a rule able to produce better results? By better is meant the production of a certain value of goods per year, at a certain cost, and of a certain quality. In my time I have worked in about forty different plants. I have never been discharged, always changing with a view to better conditions or because of slack business in the plant I was at work in. If it were possible, a record of 20 years or less of the operations of all textile plants in hours or product, would tell a great story of unemployment and constant shifting with a comparison between the class of work and the sections of the United States. In every ten operatives there are to be found a knowledge of many things covering this unemployment and efficiency question. I hope you can find a few lines here worth typing for reference. You can accomplish much in the lines you represent.

Yours truly,

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## THE FUNCTIONALIZED EMPLOYMENT DEPARTMENT

### A FUNCTIONALIZED EMPLOYMENT DEPARTMENT AS A FACTOR IN INDUSTRIAL EFFICIENCY (<sup>1</sup>)

By Ernest Martin Hopkins,

*Manager Employment Department, The Curtis Publishing Company,  
Philadelphia.*

The most significant fact pertaining to industrial management to-day is the attention which is being given to the problems of personnel. Recognition is being given to the truth that new sources of power and evolution of mechanical processes have but changed the points, in methods of production, at which the human factor is essential, without changing to any degree the ultimate dependence upon it.

The impressive thing is not that some men recognize the importance of the individual worker, for this has always been true of some; it is that such recognition is so rapidly becoming general, since it has been so long delayed. Yet the causes are obvious. Power can be produced for A and Z with little variation in cost to either. Plant design has been standardized until one can give small advantage over another herein. The same mechanical equipment can be secured by one as by the other. There is no longer marked advantage possible to the thoroughly progressive house over another, equally progressive and intelligent, in the securing of raw materials, in the mechanical processes of manufacture, or in the methods of promotion and distribution. Wherein lies possible advantage of A over Z in the competition between them? Or the question may read for Z, how may he retain his prosperity in competition with A? This is one phase of the compelling logic which is leading to the study of problems of employment.

It becomes increasingly evident that the statement frequently made is universally true, if interpreted broadly, that the interests of employer and employee are inextricably bound together.

The social significance of questions relating to the mutual interests of employers and employee is so great that these could not have been much longer kept subordinate under any circumstances; but the utilitarian advantage to employers, individually and collectively, of scientific study of these problems has become so plain that the present general interest in them among industrial leaders can most positively be ascribed to the fact that, whatever else they are, they are a vital concern of good business.

It was logical, when industrial management reached the stage that its practices could be defined, and the preliminary studies made to separate the good and the bad, in course of reducing such management to a science,

<sup>1</sup> Reprinted by permission of the Editor of the Annals of the American Academy of Political and Social Science from the September, 1915, issue—"America's interests as affected by the European War."

that attention should have been focussed first on processes, machines and buildings. These things needed to be right before the worker could realize his possibilities. It is to be recognized, however, that though the word "efficiency" came into wide use during this stage of dealing with inanimate factors, the word is entitled to the far broader significance which carries an import of all-around effectiveness. Industrial efficiency, under proper definition, does mean and must be understood to mean right workers and right conditions for them as distinctly as right machines and conditions designed for their best operation.

This is the broad principle on which the functionalized employment department has been established. It is simply the application of the same reasoning to finding and maintaining the labor supply that has already been applied in industry to problems of building, equipment, mechanical supervision, and the methods by which business is despatched.

There is this greater difficulty in establishing a functionalized department for employment and correlated responsibilities than in establishing a department for almost anything else, that however frankly men will acknowledge limitations on some sides, few will admit or believe that they are not particularly perspicacious in their judgments of men. This is particularly true of those of circumscribed vision, whose advantages have been few and whose opportunities for developing breadth in their mental processes have been limited, as is the case with many minor executives or sub-foremen. Such an one feels, perhaps not unnaturally, that his prestige with the new employee is impaired if employment is secured through some department outside his own. Moreover, he is likely to ascribe to the employment department no other basis of appraisal than he himself has used, and with this as a premise, he argues that his own intuition is better than that of one who lacks his own intimate knowledge of the work for which he is responsible. Almost invariably, too, he fails to value to reasonable extent the loss to his own work which comes from the waste of time involved in interviewing and employing, even if he undertakes to do this with such care as that of which he may be capable.

Too much emphasis may not be placed, however, on the difficulties incident to establishing the employment department, for the foremost concerns have so definitely accepted the principle that it is bound to be generally accepted. It should simply be recognized that such a department cannot fulfill its function to become a large contributor to the success of the business unless it be given recognition and indorsement sufficient to gain for it co-operation from the departments with whose problems of personnel it must be in contact. A large responsibility rests upon the employment department to work carefully and considerably, with open mind and appreciation of the problems of others; but even so, occasional support in the way of instructions from above will be needed to give the department access to some parts of the field wherein its work should be done.

This raises the question as to the place of the department in the organization. There can be only one answer, if the installation of the work is made in good faith—it must be in direct contact with the top-most management, where its problems can be passed upon promptly and decisively by ultimate authority, if issues arise. More important than this, the creation and establishment of such a department in a business should mean that the avenues of communication between those in the ranks and those at the top, which too often have become closed as a business has grown large, are to be reopened. If this does not become true, the potentiality for good in such work can never be more than partially realized.

It is a duty that distinctly belongs to the employment office, to cultivate sympathetic knowledge of the opinions of workers and to bespeak these to the management. All industry is so set up that the word of the management can be quickly and easily transmitted down. It is no less of consequence to those above than to those below that some agency exists for facilitating the reverse process.

Industrial efficiency could not have been so definitely advanced as it has been without gigantic accomplishment in gathering data, codifying it, and the establishment of systems to realize benefits from the lessons learned. It is useless to expect that great businesses can be conducted without a great mass of prescribed routines designed for the greatest good in the majority of cases. But it is true that the necessary struggle for uniformity and system has involved the limitation of individualism to standardized types to an extent that raises some serious questions.

It is impossible to set limits to the advantages which may accrue to a business from such attributes of personality among its men as loyalty and enthusiasm, and yet personality cannot well be standardized. Herein the employment department needs particularly to be on guard in its own work. It must steer between the danger of following the foreman's method of picking men because he likes their looks or their manners, and a method so systematized and impersonal as to have eliminated all individualism.

It is for this reason that great caution is needed to avoid blind acceptance of methods from among the various systems evolved by the less careful industrial psychologists or advocates of character analysis. Much along these lines has been established which ought to be known and utilized to reasonable extent in the employment office. It is surely true that certain physical types are particularly adapted to certain forms of manual labor; it is as true that certain mental types have especial aptitudes which ought to be recognized in assigning them to work. Experimental psychology has taught us how to determine the mental defective and the moral, and is capable of doing far more for us. But there is a refinement of system proposed by some that is neither commercially profitable nor ethically sound, in that on the one hand, at large expense, it

attempts the standardization of personality, and on the other, it accepts unduly a theory of predestination which would largely limit the opportunities for proving individual worth.

There are, however, no differences of opinion concerning the desirability of standardization of jobs. This is not properly a responsibility of the employment office, but knowledge of what the respective standards are is one of its vital needs. If the data have not been gathered and made available, one of the most essential moves for the employment office in the establishment of its own work is to undertake such a survey of requirements of the work and opportunities for the workers in the respective departments and sub-departments as brought together will give a composite of the whole plant. Such a survey need not be made obtrusively nor need it become a nuisance to department executives. It will necessarily involve the expenditure of considerable time. But it is worth while doing, even if it has to be done very quietly and very slowly, for while it offers the most fundamental data for employment work, it likewise often shows such inconsistencies in practice that a company can markedly raise its average of efficiency, if only it brings the departments of lax or faulty standards somewhat up towards the grades of those which are being well administered.

Such a survey in its elementary form should show at least such facts concerning the respective departments as preferred sources of supply for new employees, education or special training required, any special attributes desired, initial wages paid, opportunities for advancement in position and possible wage increases, working conditions and working hours, and labor turn-over.

The term "labor turn-over," which has recently come into general use, even now is not fully understood by some, and is perhaps best described by the more brutal phrase in general use, "hiring and firing." The annual "hiring and firing" figures represent the percentage of labor turn-over. For instance, if a company maintains a normal labor force of a thousand people, and is obliged to employ annually a thousand to compensate for those who leave or are dismissed, the labor turn-over is 100 per cent.

Probably no greater argument for the establishment of a functionalized employment department in many companies could be made than to induce a study of the labor turn-over figures. It is not an unusual experience to find employers who estimate the figures of their own concerns at less than 50 per cent., when it actually runs to several times that figure.

It is to be noted that such figures, though illuminating in themselves, need further analysis to be of major use. For instance, reasonable demands may be such in the specified shop normally enrolling a thousand hands that two hundred must be employed periodically for a few weeks and then dismissed, their places again to be filled in a few more weeks. If this happens five times a year, the turn-over figures will be a 100 per

cent. The other extreme would be a concern with such lack of knowledge of the money loss involved in change that practically every job was vacated and filled at least annually, when likewise the labor turn-over would be 100 per cent. Such figures are much too high, but while in the latter case the concern in question would bear much of the expense, in the former it is more largely imposed upon the community. Working men or working women who, through no fault of their own, are deprived successively, time on time, of the opportunities to realize their earning capacities, inevitably suffer impairment of courage, self-respect, and even moral fibre, the loss of which falls first upon the community, but eventually upon industry, in the depreciation in quality and spirit of the labor supply.

It is extremely difficult to know what can be done to remove the seasonal element in employment needs in the majority of cases. On the other hand, much would be gained if, by analysis and comparison, foremen and sub-managers could be shown the futility and financial loss of the lack of comprehension which allows them to discharge carelessly on caprice, or for the maintenance of that perverted sense of discipline which they phrase as "keeping the fear of God in the hearts of their people."

There is so much advantage in having employees who know the ways and routines of a concern that it would seem that, except where dismissals are for sufficient cause, those suffering them would be preferred applicants for positions elsewhere in the company calling for like grade of ability. It is not often so, nevertheless, except where a well-established employment office or its equivalent exists. All too frequently, a reduction of work in one department of a large manufacturing plant will send workers out under dismissal, while some other department of the same plant is seeking additional help.

A rule which has been established in some large plants, and which has worked advantageously, is that no department can discharge an individual from the company's employ; it can only dismiss from its own work. In effect, this subjects the case to review of some higher official who holds the power of final discharge, gives the employment office a chance to utilize the experienced employee elsewhere, if of proved capacity, and acts as a healthy check on the impulsive high-handedness of certain types of foremen and sub-managers. Another rule which works to somewhat the same effect is to require advance notices to be filed with the employment office concerning projected dismissals, together with the reasons therefor.

Other statistics which will interest the progressive employer may be compiled, showing the degree of permanency of the labor force—thus, the percentages showing what proportion of the total enrollment has been employed less than a year, what proportion for between one and two years, and so on. Not infrequently it will be found that these figures reveal employment conditions quite apart from the theories of the head

of the house and contrary to his belief as to how his business is being run. A manufacturer employing about four thousand men told me recently that he had genuinely believed that a large proportion of his men had been with him from ten to twenty years, only to find from such a statistical table that 50 per cent. had been there less than two and a half years.

Incidentally, it may be suggested that some of the easy generalizations which have been made from time to time in regard to the lack of stability of workmen as groups, because of the presence therein of so-called "floaters," would be materially altered if it could be known to what extent it had been beyond the volition of workmen of unquestioned skill to remain permanently placed. In general, the handling of dismissals has been dictated by the intelligence of sub-executives rather than by the intelligence of the management, and there has been no supervision from above.

The functionalized employment department is dependent, for successful accomplishment, in particularly specific ways upon the smoothness with which its work can be made to articulate with other functionalized departments, such, for instance, as the accounting department, the schedule or routing department, and other like ones. It must rely on these for the data to prove much of its own work, and in turn it may find within its perspective facts highly important to them. Through the large number of its interviews, it should come to have an unusually comprehensive knowledge of current rates of wages for established grades of work. It ought, furthermore, to come into position to know to what extent the law of increasing returns will apply to additional rates of pay established to secure superior ability.

It is probably due to the fact that the attention of industrial leaders has been fixed in the past so intently on problems of power, plants, and machines that so little practical recognition has been given to the fact that the most efficient worker, even at considerably increased cost, is far and away the most profitable. The most obvious demonstration of this exists perhaps in the case of a shop filled with expensive machinery working to full capacity, yet with its production falling behind its orders. Would there be any hesitancy if its management could have an option offered between added efficiency and enthusiasm among its employees that would increase its potentiality a half through the enrollment of its labor force on the basis of capability to earn a largely increased wage, and the alternative of the necessity of adding 50 per cent. to its plant and mechanical equipment? The truth is that seemingly there is not yet any general understanding among employers that a high gross payroll does not necessarily result from a high individual wage, or expressed in slightly different terms, that the cost per unit of production may be larger the lower the rate of pay to the individual worker.

A somewhat analogous principle is involved in the matter of working

hours per day. The old-time practice indicated a theory that if so much work could be accomplished by a working-week of sixty hours, 20 per cent. more could be accomplished in a working-week of seventy-two hours. Reduce these figures to fifty hours a week as compared to sixty, and the theory does not seem to have been so completely discarded even now. Yet the facts are available from modern investigations of the physical and nervous reactions from fatigue, lack of variety incident to refinements of methods in specialization, and want of time for recuperative processes, to show that up to some definite limit actual gross production may increase under reduction of hours; or that up to some other limit a much larger proportionate production per hour of work may be secured. Moreover, these arguments have been proved again and again in the actual operations of progressive companies.

It is not to be understood that the employment department does have or should have final authority to govern these policies. But the department is in a position to study and compile data regarding these problems as very few other departments can; and either in initiating or contributing to investigations of all such matters affecting the human relations, it has opportunity for rendering the most valuable kind of staff service to the general administration and to departments associated with itself.

Industrial efficiency, with all its vital importance, is yet a means to an end, and not the end itself. It is the quality or manner by which a highly desirable result is to be accomplished, but it is not the result. It has too often happened that an earnest advocate of efficient methods has become so engrossed in the technique of his profession as to ignore its purpose, to the consequent detriment of the general cause.

So it may be too easily with functionalized employment work. An office may be set up under the direction of a master of system, which in its operation shall be a model of method. Interviewing of applicants, filling out of skillfully devised application blanks and filing them, and creation of numberless card records may be so conducted as to show these things to have been reduced to an exact science, and yet the value of the department remain problematical.

Of course, no effort must be spared to have the ways devised by which the best possible candidates shall be offered and chosen for the respective kinds of work. But the work is incomplete if it stops here. The good of the business is the criterion by which all accomplishment must be judged. If a high grade of labor has been secured the company's interests demand that the environment, the conditions and the opportunities shall be made such as to hold it. The employment department cannot omit any legitimate effort to influence policies to this end. It must work helpfully and understandingly with other departments, without pride or arrogance. But it must work unceasingly with clear vision toward the goal of making its distinct contribution to the company's prosperity through the improved human relationships which it may help to develop.

# THE PHILADELPHIA ASSOCIATION FOR THE DISCUSSION OF EMPLOYMENT PROBLEMS

(Organized June 28, 1915)

## OBJECT

A society for the discussion of employment problems will include as eligible for membership any reputable employing concern in and around Philadelphia, employing more than a certain minimum number of employees. These firms shall be represented by the manager ultimately responsible for employment, or any other executive whom the firm may designate, who may be concerned with the choosing or directing of the labor force. In general, the object of the society is the co-operative investigation and discussion of principles and methods of securing, assigning, and directing the personnel of a business organization for the purpose of ascertaining as nearly as possible the best principles governing employment.

## PHASES OF DISCUSSION AND INVESTIGATION

More concretely the discussions and investigations of the society will include such subjects as the following:

1. Methods of securing new employees.
2. Selection, hiring and assignment.
3. Labor turn-over and discharges.
4. Quality of supply of new employees.

Classification as to adaptability for different kinds of work.

Co-operation with schools, colleges, and other sources of supply as to methods of improving.

5. Nature of the work: classification as to demands upon the individual.
6. Training within the organization.

Apprentice systems, institutional instruction classes, etc.

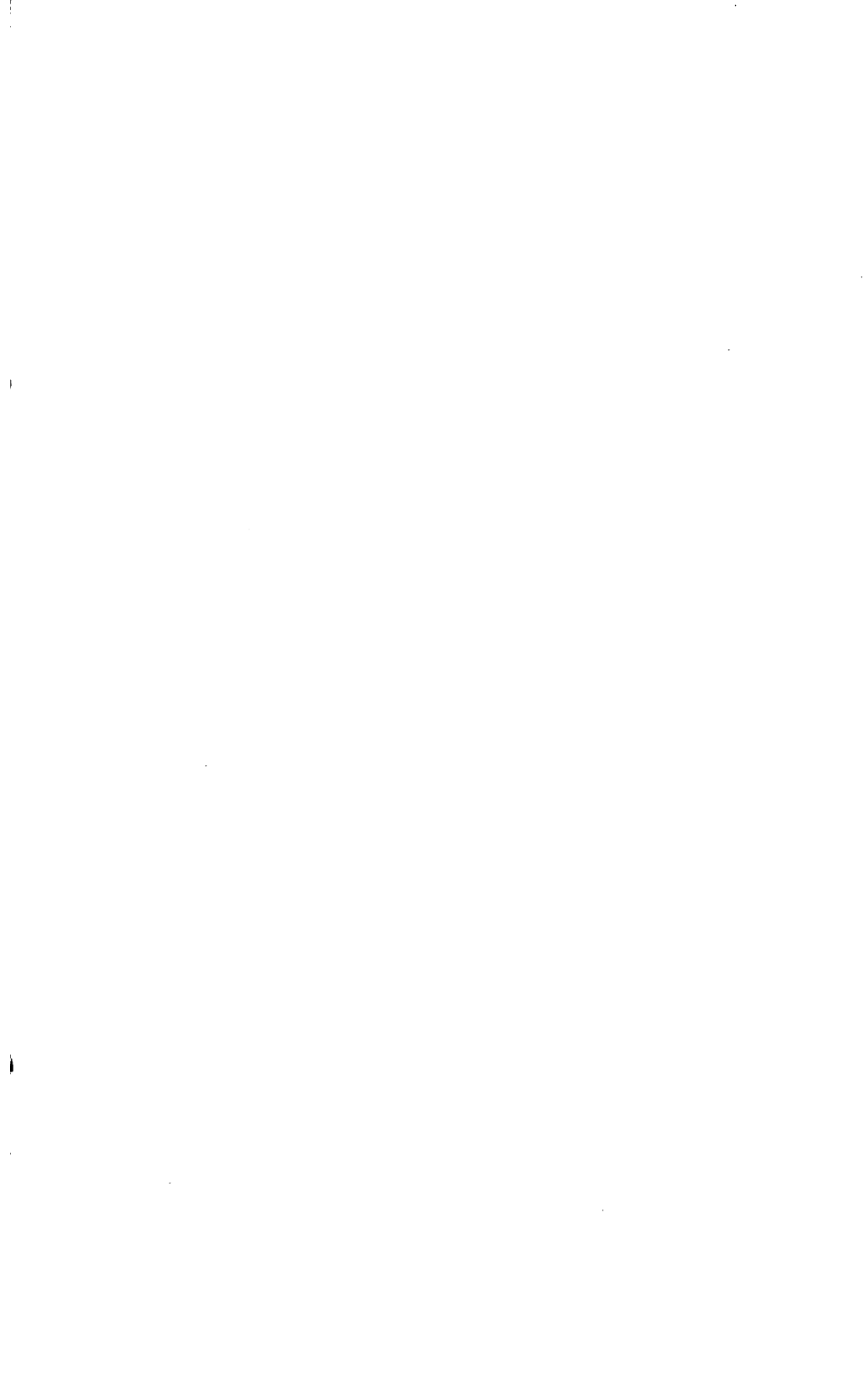
7. Conditions of work: health, recreation, etc.
8. Promotion and transfer within the organization.
9. Promotion and transfer between co-operating organizations.
10. Records of the efficiency and fitness of workers.
11. Vacations.
12. The fluctuations in employment.
13. Wages, bonuses, etc.

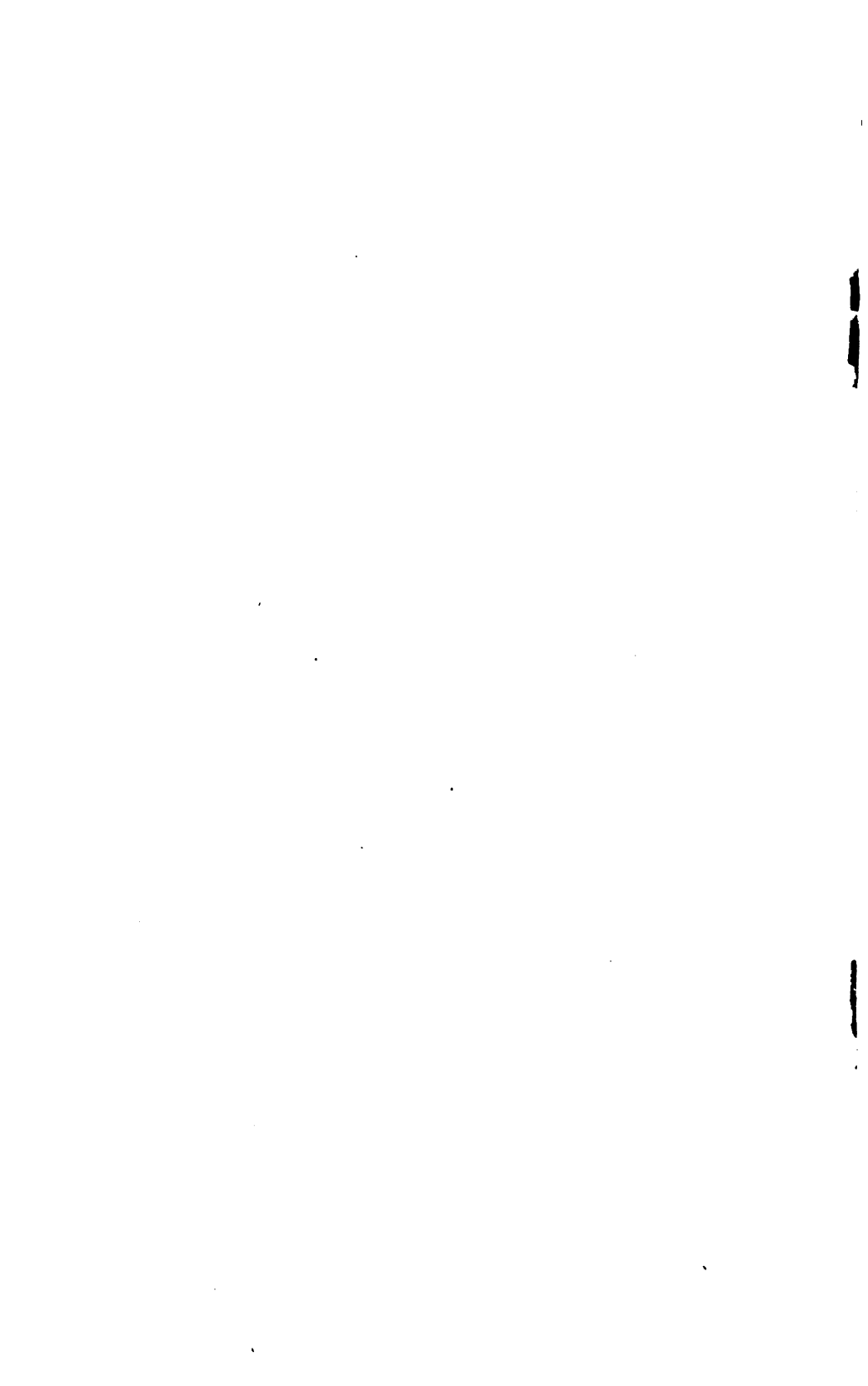


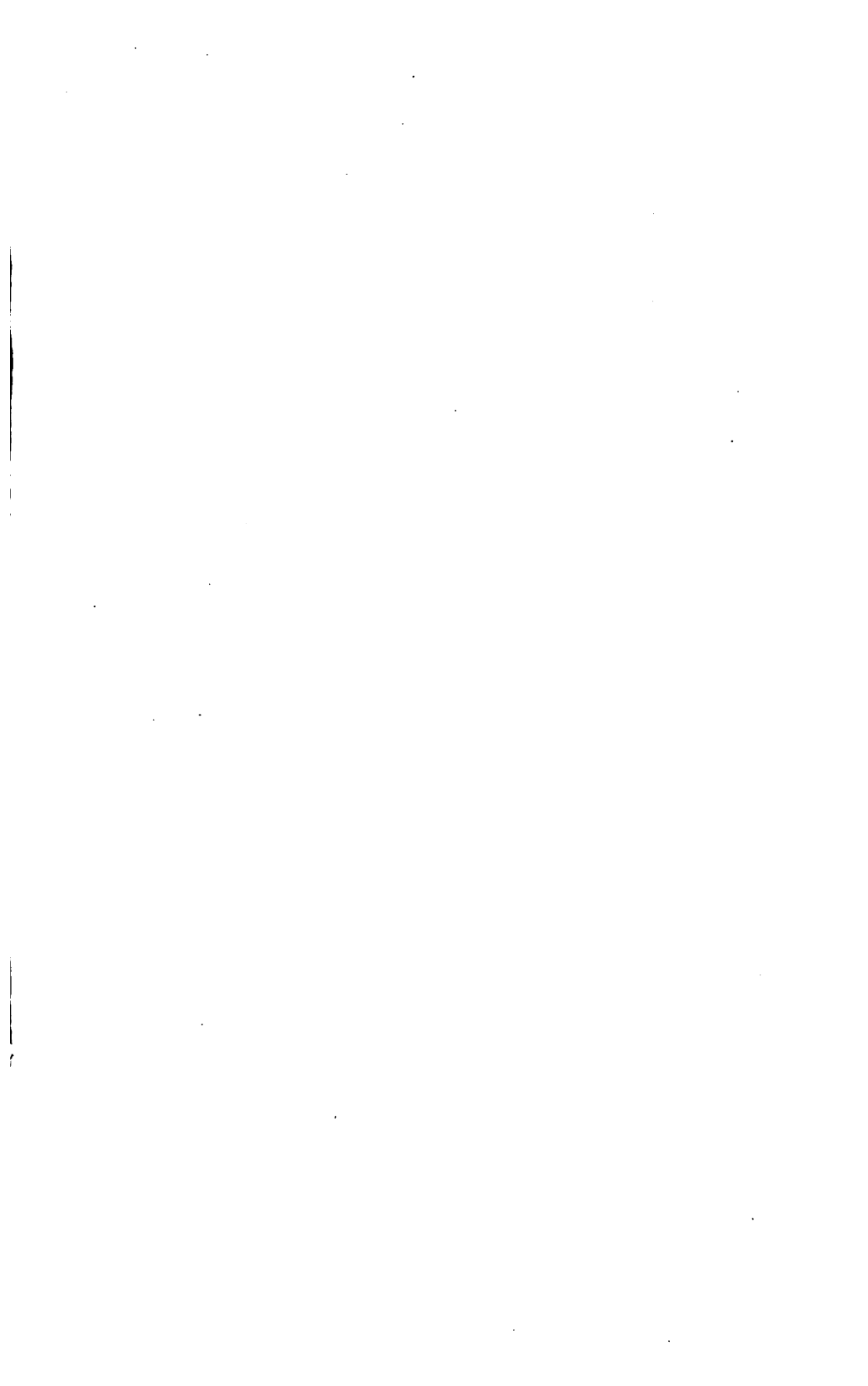
**METHODS**

The discussion and investigation by the society will be along the following lines:

1. Discussions shall be opened at regular meetings of the society by addresses either by members or non-members on specific phases of the problems of the society.
2. Special investigations into certain phases of employment problems that the society may deem wise.
3. The information resulting from the discussions and investigations of the society shall be made available for the constant use and reference of the members whenever and in any way the society may direct.







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Books not returned on time are subject to a fine of  
50c per volume after the third day overdue, increasing  
to \$1.00 per volume after the sixth day. Books not in  
demand may be renewed if application is made before  
expiration of loan period.

SEP 7 1931

DEC 21 1931

APR 12 1971 9 6

REC'D LD MAR 30 71 -3 PM 20

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